

THE PORT MORESBY–SOLOMONS OPERATION AND THE ALLIED REACTION, 27 APRIL–11 MAY 1942

Milan Vego

The ultimately unsuccessful Japanese attempt to capture Port Moresby in May 1942 is commonly referred to as the “battle of the Coral Sea.” Almost all focus is usually given to the decisive tactical engagement between carrier forces. However, the Japanese effort was officially code-named Moresby Operation and was often called the “Port Moresby–Solomons operation.” In formal terms, it

Dr. Milan Vego has been a professor in the Joint Military Operations Department at the U.S. Naval War College, Newport, Rhode Island, since August 1991. A native of Bosnia and Herzegovina, he obtained political asylum in the United States in 1976. Dr. Vego has been an adjunct professor at the Defense Intelligence College (1984–91) and a senior fellow at the Center for Naval Analyses in Alexandria, Virginia (1985–87), and at the former Soviet Army Studies Office, Fort Leavenworth, Kansas (1987–89). He earned a BA (1970) in modern history and an MA in U.S./Latin American history (1973) at the University of Belgrade and his PhD in European history from the George Washington University (1981). He holds a license as a master mariner. Dr. Vego has published eight books, including the textbooks Operational Warfare (2001) and Joint Operational Warfare: Theory and Practice (2008; reprint 2009), and The Battle for Leyte, 1944: Allied and Japanese Plans, Preparations, and Execution, plus numerous articles in professional journals. He published his most recent book, Operational Warfare at Sea: Theory and Practice, in December 2008.

was on the Japanese side a major offensive and joint operation, planned and executed to achieve an operational objective—the capture of Port Moresby, on the Australian territory of New Guinea (now Papua New Guinea). For the Allies, in contrast, “the battle of the Coral Sea” was a major defensive and joint operation aimed at preventing an enemy landing at Port Moresby. Both U.S. and Australian naval forces and land-based aircraft took part.

The Japanese inflicted larger losses on the Allies than they suffered and hence won a clear tactical victory; however, the Japanese failed to achieve the ultimate objective of their operation, and hence, the Allies won an operational victory. The operation was the first major setback for the Japanese in their drive, which started with their surprise attack on Pearl Harbor, to expand vastly their control in the Pacific. It is a powerful example of the value and importance of the

human factor in warfare. More generally, and despite the passage of time, the Port Moresby–Solomons operation provides a number of operational lessons of great importance to current and future naval leaders.

THE STRATEGIC SETTING

By the beginning of 1942, the strategic situation in the southwestern and South Pacific had become extremely serious for the Allies. The Japanese were on the verge of victory in the Philippines. They were making rapid progress in their invasion of the Netherlands East Indies (NEI) and thereby threatened northern Australia. The Japanese had included the invasion of the Bismarck Archipelago in their plan, developed in November 1941, as the “First Operational Stage” of the war in the Pacific. In their view, their major base at Truk, in the central Carolines, would not be secure as long as Rabaul, New Britain, was in enemy hands.¹ Accordingly, Japanese troops captured Rabaul on 23 January 1942. The fall of Rabaul alarmed greatly the Australian government and people; Australia’s Northeast Area was now virtually unprotected. The Japanese next occupied the rest of New Britain, as well as the Admiralties, New Ireland, and Bougainville, in the upper Solomons. The vulnerability of Australia was shown on 19 February 1942 when four Japanese fleet carriers conducted a massive raid on the port of Darwin.²

By February 1942, the Japanese had accomplished all their initial strategic objectives, and at far less cost than expected. However, instead of consolidating gains, the Japanese leaders made the fatal mistake of deciding to expand their defense perimeter. Japanese Imperial General Headquarters (IGHQ) in Tokyo had initiated the staff studies for the Second Operational Stage of the war in January 1942.³ The Plans Division of the First (Operational) Section of the Navy’s Section (the Naval General Staff) of IGHQ was a strong advocate of invading Australia. As early as December 1941, the Naval General Staff had insisted on capturing the strategically important points in northern and northeastern Australia; this could be accomplished, it believed, with very little expenditure in men and matériel.⁴ The Naval General Staff argued that Australia represented the greatest threat to Japanese control in the South Pacific, because it could serve as a base for a counteroffensive. Australia also possessed economic resources of great potential importance to Japan’s war industry.⁵ General Hajime Sugiyama, chief of IGHQ’s Army Section (Army General Staff), was opposed to invasion of Australia. He said, “If we take only part of Australia, it could lead to a war of attrition and escalate into total war.”⁶ The Army General Staff instead intended to strengthen the defensive perimeter against the growing enemy force in Australia by capturing Port Moresby and some important positions in the South Pacific. The Japanese had not included Port Moresby as an objective in their plans for

the First Operational Stage of the war. In their view, to secure Rabaul, Port Moresby had to be taken; after the capture of Port Moresby, the enemy's air strength in northeastern Australia had to be neutralized.⁷ The army also considered the Solomons archipelago to be a stepping-stone for an eventual enemy advance toward Japanese-held Rabaul—hence the southernmost island of the Solomons, Guadalcanal, and the islands of Nauru and Ocean (modern Banaba) in the Gilberts had to be captured.⁸

The Combined Fleet started planning for the Second Operational Stage of the war in January 1942. Its commander in chief, Admiral Isoroku Yamamoto, and his chief of staff, Rear Admiral Matome Ugaki, had views different from those of the Naval General Staff. Yamamoto insisted that the Imperial Japanese Navy (IJN) must retain the initiative and cautioned against complacency.⁹ He argued that the IJN must retain the initiative by seizing Midway and capturing the islands of Johnston and Palmyra as advanced bases for an eventual landing on the Hawaiian Islands.¹⁰ Yamamoto considered the capture of New Caledonia, Fiji, and Samoa to be a “folly.” Yamamoto believed that it would be difficult to hold the islands some four thousand miles from the Japanese home islands. Moreover, the operation would not be effective, because as long as the American main fleet was afloat, it could always reach Australia by another route. Yamamoto was willing only to provide ships for the capture of Port Moresby and Tulagi, in the Solomons, but not for other objectives in the South Pacific.¹¹

The original idea of invading Australia was slowly abandoned by the Naval General Staff. Ultimately, both general staffs agreed that the best way of isolating Australia was by capturing Fiji, Samoa, and New Caledonia. Sugiyama urged on Admiral Osami Nagano, chief of the Naval General Staff, the need for both services to study such an operation, dubbed FS. This option received a more favorable view in late February and the beginning of March 1942. On 28 February, a liaison conference concluded that total isolation of Australia was the key to Japan's mastery of the Southwest Pacific.¹²

The Combined Fleet intended also to destroy the British Eastern Fleet and capture Ceylon (today, Sri Lanka) and thereby extend Japanese power over the central Indian Ocean. This in turn would protect the western flank of the East Indies and thereby allow the Combined Fleet to deal with the U.S. Pacific Fleet.

The Combined Fleet presented this plan to the Naval General Staff, which brought it to the attention of the army. The army supported eliminating the British fleet from the Indian Ocean and cooperating with the Germans in the Middle East but protested that the capture of Ceylon would be premature. Army leaders were concerned that if they agreed that troops were available, the navy might divert their scarce resources for Pacific operations. Because of the army's objections and the lack of response from Germany, IGHQ decided to limit

operations in the Indian Ocean to massive raids by the 1st Air Fleet (carrier striking force) against Ceylon and enemy shipping in the Bay of Bengal in early April. This operation would tie up five of the navy's six large carriers until the end of April. Then at least three carriers (*Akagi*, *Sōryū*, and *Hiryū*) would have to return to the homeland for upkeep and refitting; the 1st Air Fleet would not be ready to conduct another major operation until the end of May.¹³

The differences between the navy and the army regarding the objectives in the Second Operational Stage of the war were heatedly discussed during late January and February 1942. On 7 March, the services tried to resolve the dispute at the Imperial Liaison Conference in Tokyo. On 13 March an agreement was finally reached; it was reported to the emperor and distributed in a document entitled "Fundamental Outline of Recommendations for Future War Leadership." In it the option of invading Australia was dropped.¹⁴

On this basis, in mid-March the Combined Fleet formulated a strategic plan for the Second Operational Stage of the war. The plan contemplated the capture of Midway Island by using the full strength of the Combined Fleet, with the aim of luring the U.S. Pacific Fleet into a "decisive battle." From Yamamoto's perspective, a great advantage of this plan was that it would require minimal participation by the army and so would not risk an army veto in IGHQ. The Combined Fleet plan was the subject of the discussion at a conference held at IGHQ on 2–3 April. At the conference the Naval General Staff insisted that the Midway operation include simultaneous capture of the western part of the Aleutian chain, and the Combined Fleet acquiesced. The Naval General Staff also argued that the entire operation should be delayed until late June, because it was unwilling to divert forces from the operation to secure Rabaul in favor of operations in the Central and North Pacific. Yet on 5 April the Naval General Staff, faced with a threat by Yamamoto to resign, reluctantly agreed to his timetable for a Midway-Aleutians operation.¹⁵

In late April, IGHQ's Army and Naval General Staffs agreed to a compromise plan that envisaged the occupation of strategic points in New Caledonia, the Fiji Islands, and Samoa, to be carried out sometime *after* the Port Moresby–Solomons operation.¹⁶ For its part, the Combined Fleet's staff argued that any South Pacific project should be delayed until after the Midway-Aleutians operation.¹⁷ The Naval General Staff replied that preparations for operations in the "South Seas" were already started. It also maintained that Midway was beyond the effective range of Japanese land-based aircraft and that it would be very difficult to garrison and supply even if captured, while its loss would not significantly affect American morale. In the Naval General Staff's view, cutting the supply lines to Australia would greatly affect morale; it would be more likely than a threat to Midway to draw the Pacific Fleet into a decisive battle and thereby shorten the war.¹⁸

The differences between the Combined Fleet and the Naval General Staff over the objectives and timetable of the Second Operational Stage of war were not resolved until after the Allied carrier raid on Tokyo—"the Doolittle Raid"—on 18 April. This raid had (as its planners intended) a great psychological effect on the Japanese strategic leadership. Both the navy and the army had failed in their duty to safeguard the homeland and the emperor from attack. Yamamoto regarded it as a "mortifying personal defeat." The Japanese admirals and generals, suffering great loss of face, now overreacted and made several strategic decisions that proved fatal for Japan.¹⁹ Specifically, they adopted Yamamoto's argument to extend the defense perimeter into the Central Pacific.²⁰ A plan for the Second Operational Stage of war was approved by IJN Directive No. 86: it set (following raids in the Indian Ocean in April) the occupation of Port Moresby for early May 1942, of Midway and the Aleutians for early June, and of Fiji, Samoa, and New Caledonia for July.²¹

On the American side, strategy in the Pacific was largely driven by Admiral Ernest J. King, appointed as Commander in Chief, U.S. Navy (COMINCH) on 20 December 1941. On 16 March, President Roosevelt relieved Admiral Harold R. Stark as Chief of Naval Operations (CNO); ten days later, King assumed the duties of CNO in addition to those of COMINCH. Stark had been very pessimistic about the Allies' ability to stem the tide of Japanese conquests. He had been willing to abandon all positions west of the international date line (longitude 180° east), including the Philippines and Australia. In contrast, King was determined to oppose any further Japanese advance in the Pacific and eventually to mount a counteroffensive. Admiral Chester W. Nimitz, who had replaced Admiral Husband Kimmel as Commander in Chief, Pacific Fleet (CINCPac) on 31 December 1941, was directed by King to halt the Japanese advance, keep the line of communications with Australia open, and mount raids with carrier forces against the enemy's strongpoints in the Pacific.²²

Because of the growing Japanese threat to Australia, the British had suggested that the U.S. Pacific Fleet assume responsibility for defending the northeastern approaches to Australia and for securing Australia's lines of communication with the United States. At first, the U.S. Navy had been reluctant to assume such responsibilities, the Pacific Fleet having been greatly weakened by the Japanese attack on Pearl Harbor. Yet King agreed on 1 January 1942 to study the problem. On 27 January 1942, the ANZAC (Australia–New Zealand Army Corps) Area was established. It encompassed eastern Australia, Tasmania, New Zealand, New Caledonia, New Hebrides (modern Vanuatu), Solomon Islands, Papua New Guinea, and Fiji. Australia and New Zealand would provide forces and would be supported by the United States. The combined force would be under command

of an American flag officer and directly subordinate to the CINC of the United States Fleet (King).²³

King appointed Vice Admiral Herbert F. Leary as the ANZAC Area commander. Leary's task was to cover the northeastern and eastern approaches to Australia and New Zealand, protect friendly shipping in the area, support the defense of island positions, and destroy enemy forces in the area.²⁴

At the end of February 1942, the Australian chiefs of staff assessed the country's defense in light of the fall of Singapore, the raid on Darwin, and the impending Allied collapse in the NEI. They believed that if the Japanese advanced into the Coral Sea to cut off Australia's communications with North America they might attack Port Moresby and then the Australian mainland. In their view, Port Moresby was too vulnerable to be reinforced but too important to be abandoned. Another option for the Japanese was to advance to the Solomon Islands and then capture the New Hebrides and New Caledonia.²⁵

In the spring of 1942 the only troops then available for defense of Australia were about 265,000 militia, poorly trained and equipped. The best Australian troops were deployed abroad—three divisions in the Middle East and elements of one division in Singapore, Timor, Ambon, and Rabaul.²⁶ By mid-April, the Australian army at home had two first-line divisions, an armored division, and eight second-line militia divisions. The 41st Division was then the only major force of the U.S. Army in Australia.²⁷

The key for the successful defense of Australia and New Zealand was the security of their lines of communication to the U.S. West Coast and Hawaii. In the U.S. Joint Chiefs of Staff—the main arena for discussing strategic issues facing the United States—the navy and army had fundamentally different views on strategy in the Pacific. The U.S. Navy realized by February that the Philippines were lost. Hence, it believed, the defense of Australia and of communications to that country was of vital interest to the Allied cause. In contrast, the army's chief of staff, General George C. Marshall, was adamant that the principal effort must be a cross-channel invasion of Europe. The chief proponent of that view was Brigadier General Dwight D. Eisenhower, appointed as the chief of the War Plans Division on 16 February 1942. For the army and Eisenhower the main conditions for winning the war were defense of United Kingdom, continued participation of the Soviet Union in the war, and preservation of Allied positions in the Middle East and India in order to prevent the junction of German and Japanese forces.²⁸ In Eisenhower's view, the Japanese conquest of the NEI removed one of the major reasons for making a stand in the Southwest Pacific. Because the Japanese now controlled the region's oil and tin and practically the world's entire rubber resources, the reasons for committing more forces in the theater were "less compelling than they were three months ago."²⁹

King was persistent in his efforts to establish island bases with army troops and land-based aircraft. He secured a small army force to garrison Bora Bora in the French Society group. By early January 1942, the army had promised to send troops to Canton and Christmas Islands in the Gilberts (Kiribati today), thereby providing additional security to Samoa. It also promised to garrison New Caledonia. On 5 February, King recommended that Funafuti Atoll in the Ellice Islands (Tuvalu today) be made an advance base to cover Fiji and Samoa. He was concerned with the Japanese activity in the Gilberts and was convinced that the Allies had to interpose bases between them and southern Pacific islands.³⁰

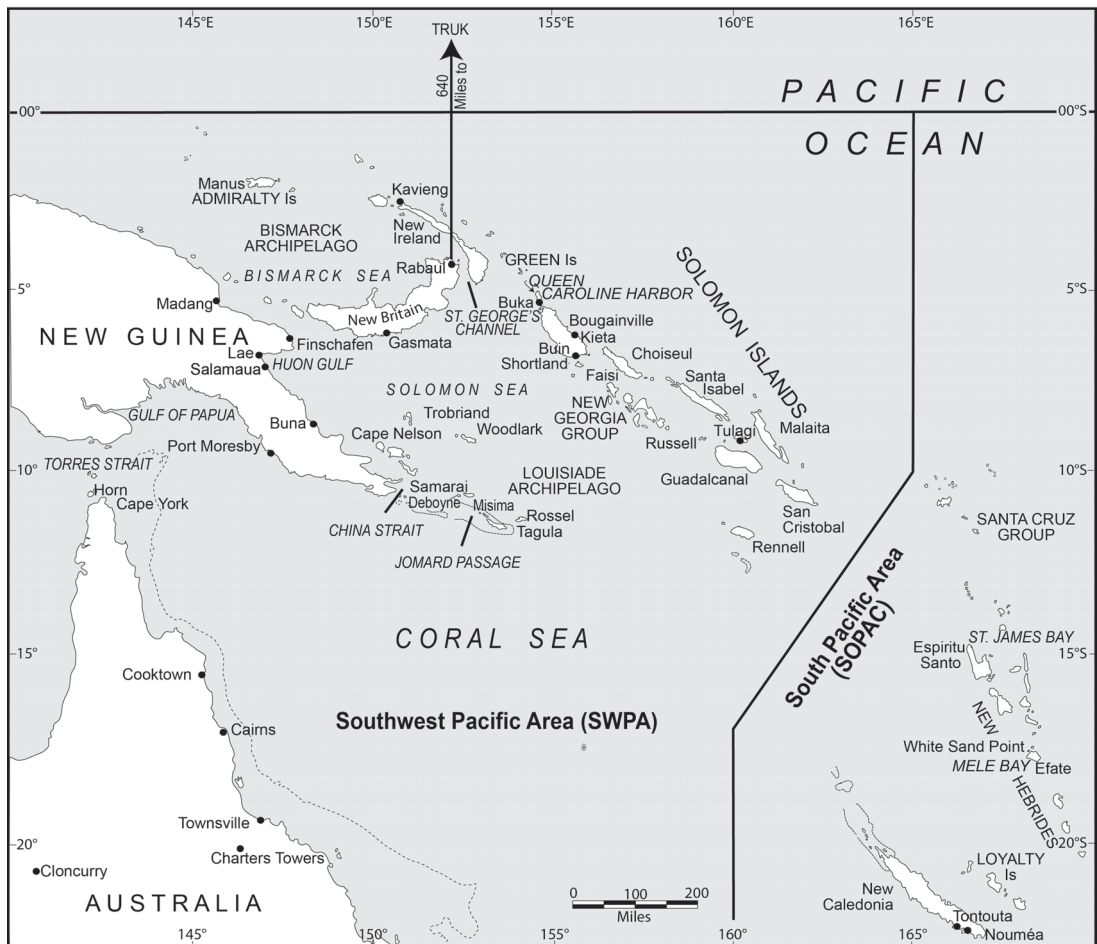
On 5 March, at a meeting of the Joint Chiefs of Staff with President Roosevelt, the main topic was Pacific strategy. Roosevelt seemed to agree with King's views on the strategy to be followed in the Pacific. This in turn led King to direct Rear Admiral Richmond K. Turner, chief of the War Plans Division, to develop a comprehensive plan for the war in the Pacific.³¹ On 16 March, King suffered a major setback: the Joint Chiefs decided to implement a War Department plan for rapid buildup in Europe and restriction of reinforcements in the Pacific to "current commitments." Nevertheless, the Joint Chiefs approved King's request for bases at Efate and Tongatabu. The army believed that three divisions in the southwestern Pacific were sufficient; the Joint Chiefs approved a single Army Air Forces (AAF) pursuit squadron for Christmas Island, Canton, Tongatabu, and Efate. Fiji and New Caledonia would have two squadrons each of medium bombers, about sixty in all.³²

THE THEATER

The size and physical characteristics of a maritime theater play important, even critical, roles in the conduct of war at sea. The Port Moresby–Solomons operation was conducted over a relatively large part of the southwestern Pacific (see map 1). The 1,850,000-square-mile Coral Sea is very deep (average depth about 7,850 feet); it is bounded in the west by northeastern Australia and the Great Barrier Reef, off the coast of Queensland; in the north by southeast New Guinea, the Louisiade Archipelago, the Solomon Islands, and the Santa Cruz Islands; and in the east by the New Hebrides and Loyalty island groups and New Caledonia. Its southern boundary runs along latitude 25° south. The distance from Cooktown to Espiritu Santo Island is about 1,300 miles, while Guadalcanal is about 950 miles away from latitude 25° south. Hence, the Coral Sea provided ample room for carrier operations.

The Coral Sea is generally free of navigational hazards, except for numerous islands and reefs on the western, northern, and eastern fringes, and the 1,600-mile-long Great Barrier Reef to the west. The only routes through the Louisiade Archipelago to the Solomon Sea in the north are the then poorly charted Jomard

MAP 1
OPERATING AREA



Passage, 4.9 nautical miles wide, and the four-mile-wide China Strait off the southeastern tip of New Guinea. The Coral Sea is occasionally subject to fronts moving off Australia, bringing towering cumulus clouds, showers, and squalls over areas fifty to 150 miles wide.³³ However, the weather is dominated by southeasterly trade winds. Hence, during the battle of the Coral Sea the Japanese carriers—moving southward, into the prevailing wind—were able to launch their aircraft much faster than the Allied carriers, which had to turn into the wind, away from the enemy carriers, to launch and recover. On the other hand, the southeasterly wind gave the Allied carriers an advantage during their withdrawal from the operating area.³⁴

The Japanese controlled a large number of positions in the central and southwestern Pacific prior to the Port Moresby–Solomons operation. The most important naval and air base in the central Carolines was Truk Lagoon (Chuuk

today), forty-nine by thirty miles in size. Likewise, the newly acquired base at Rabaul, about 640 miles south from Truk, was centrally located in the southwest Pacific. It has a first-class anchorage. A 620-mile land-based-aviation patrol arc encompassed the Solomons to the east, most of eastern New Guinea to the west, and half of the Solomon Sea to the south.³⁵

Other important positions occupied by the Japanese in early 1942 were Manus Island, in the Admiralties; Gasmata, on New Britain; Kavieng, on New Ireland; Buka Island; Kieta and Buin, on Bougainville; Faisi Island; and Salamaua and Lae on New Guinea.³⁶ The majority of these bases included airfields or seaplane facilities. Rabaul had then two operational airfields (Lakunai and Vunakanau), used by both fighters and bombers; a third was under construction. Both Kavieng and Gasmata had airfields. Kieta had a landing strip, but was not suitable for military aircraft. Faisi Island could serve as a seaplane base. Salamaua had a seaplane base. The airfields at Salamaua and Lae were used by fighters and bombers.³⁷ The anchorage at Shortland Island (seized by the Japanese on 13 March 1942), southeast of Bougainville, could shelter a large number of ships; an inlet at the eastern side of Shortland was suitable for a seaplane base.³⁸

From the Allied perspective, the largest and the most important position was Port Moresby, on New Guinea. Port Moresby is separated from northeastern Australia, 310 miles away, by the Gulf of Papua and the ninety-mile-wide Torres Strait. It was excellently located to support air attacks against the eastern and southeastern coast of New Guinea and the Admiralties. Port Moresby was vulnerable to a landing from the sea. The 13,360-foot Owen Stanley Range provided a degree of security from attack overland.³⁹ Control of Port Moresby would allow the Japanese to blockade the eastern sea approaches to Darwin and deny the Allies a forward base in New Guinea. It would also pose a threat of invasion against eastern Australia.⁴⁰ Port Moresby lacked good port facilities to serve as a base when the Australian troops arrived in early 1941. Port Moresby remained virtually useless for Allied heavy bombers. The nearest supporting airfields were at Townsville, some seven hundred miles away in Australia.⁴¹ In the spring of 1942 Port Moresby was defended by several thousand poorly trained and equipped troops. The rest of New Guinea was defended by a local militia called the New Guinea Volunteer Reserve.⁴²

The principal bases for the Allied ships were Tongatabu, in the Friendly Islands (Tonga); Nouméa, on New Caledonia; Efate, in the New Hebrides; Suva and Nandi, in Fiji; and Tutuila, in the American protectorate of Samoa. However, none were suitable for basing aircraft carriers.⁴³ The nearest place usable for dry-docking aircraft carriers was Pearl Harbor, and for cruisers and destroyers, Sydney, Australia. Nouméa's harbor could accommodate ships of any size. Its entrances were protected by mines, except for the Bulan Passage.⁴⁴ Limited

harbor facilities existed at Port Moresby; St. James Bay, on Espiritu Santo Island, in the New Hebrides; and Nouméa.⁴⁵

Allied air forces used fields at Townsville, Charters Towers, Cloncurry, and Darwin in northern Australia. Horn Island was an intermediate field for aircraft flying to and from Port Moresby. The airfields at Port Moresby were small and were used only for fighter aircraft and as a staging point for bombers en route to the New Hebrides and the Solomons. They also lacked dispersal areas and hence were vulnerable to attack by fighters and bombers. Tulagi was a valuable base for searches by flying boats but was poorly defended and highly vulnerable.⁴⁶ The Royal Australian Air Force (RAAF) operated a few PBY-5 Catalina flying boats from Gavutu Harbor on Tulagi until 2 May, when these aircraft were withdrawn. The Allies also started construction of an airfield at La Tontouta, New Caledonia, as another at Efate, a defended base for fighters and dive-bombers, was nearing completion.⁴⁷ The anchorage at Nouméa was not suitable as a seaplane base, because it lacked antiaircraft (AA) defenses. Catalinas were also able to use anchorages at White Sand Point and Mele Bay, the New Hebrides.⁴⁸

The Japanese base of operations prior to the Moresby-Solomons operation, anchored at Rabaul, greatly facilitated the offensive employment of naval forces and land-based aircraft toward the Solomons, the Louisiade Archipelago, and southeastern New Guinea. The Japanese naval forces and aircraft based at Rabaul operated along short and diverging lines of operations. For example, the sea distance from Rabaul to Lae is about 450 miles. Tulagi is about 550 miles by the sea southeast of Rabaul. The flying distance from Rabaul to Port Moresby is about five hundred miles.

In the spring of 1942 the Allied base of operations in the South Pacific stretched in the general westerly direction. It flanked the lines of communication from the U.S. West Coast, Hawaii, and the Panama Canal to New Zealand and Australia. Yet it was unfavorable for preventing the Japanese from gaining control of additional strongpoints in the South Pacific. The distances separating the Allied bases from each other and to the enemy bases were long. For example, the sea distance from Nouméa to Tongatabu, Tonga, is about a thousand miles. New Caledonia and the New Hebrides are about the same distance from Australia's coast. The distances from Samoa and Fiji to Rabaul are 2,230 and 3,540 miles, respectively. Nouméa and Rabaul are separated by about 1,385 miles of water. The base of operations for the Allied land-based aircraft in northeastern Australia was far from the newly acquired Japanese bases in the Bismarck Archipelago and the Solomons. For example, the air distances from Townsville and Cairns to Rabaul are 1,100 and 980 miles, respectively. Allied aircraft based in northeastern Australia operated along long and converging lines of operations against targets off the eastern coast of Papua New Guinea.

The Japanese lines of communication within the Bismarck Archipelago and toward southeastern and eastern New Guinea were almost identical to their line of operations. Their hub was Rabaul, and they were short and relatively easy to protect by land-based aircraft and ships. The route between the Bismarcks and the lower Solomons runs through deep water and is partially sheltered. In contrast, the Allied lines of communication to Australia and New Zealand were very long and highly vulnerable to the attacks by enemy submarines. For example, the distances from the Panama Canal to Brisbane and Auckland are 7,765 and 6,540 nautical miles, respectively.

OPERATIONAL COMMAND STRUCTURES

The Japanese in the southern and southwestern Pacific lacked a single theater commander having command and control of all naval and ground forces. The Fourth Fleet (the operational designation of which was the South Seas Fleet) was responsible for all operations in the South Pacific, Caroline Islands, the Marshalls, the Marianas, and Palau.⁴⁹ Its commander was Vice Admiral Shigeyoshi Inoue, with headquarters in Truk; the secondary base was at Kwajalein, the Marshalls.⁵⁰

All Japanese naval land-based aircraft in the southwest and the South Pacific were subordinate to the 11th Air Fleet, under Vice Admiral Nishizō Tsukahara at Tinian, in the Marianas.⁵¹ The 11th Air Fleet consisted of the 21st, 24th, 25th, and 26th Air Flotillas. It was responsible for securing eastern New Guinea, the Bismarck Archipelago, the Marshalls, Wake Island, the eastern Carolines, and the area around the Japanese homeland. It was also to cooperate with the Fourth and the Fifth Fleets.⁵² The 24th and the 25th Air Flotillas were attached to the Fourth Fleet until control returned to the 11th Air Fleet on 17 April. The 24th Air Flotilla was redeployed out of the area, leaving only the 25th Air Flotilla to support the Fourth Fleet. Its headquarters, under Rear Admiral Sadayoshi Yamada, was moved to Rabaul on 29 March and was activated on 1 April. The 25th Air Flotilla was designated the 5th Air Attack Force (5 AAF) for operational purposes.⁵³

The entire Pacific had been designated as an area of U.S. strategic responsibility. On 9 March 1942, the Allies formally divided the Pacific theater into three large “areas” (or in modern terms, theaters of war): the Southwest Pacific Area (SWPA), the Southeast Pacific Area, and the Pacific Ocean Areas (POA).⁵⁴ General Douglas MacArthur was appointed as the Commander, SWPA (COMSWPA); he formally assumed this responsibility on 18 April 1942. The ANZAC Area was formally abolished on 22 April and Admiral Leary was appointed Commander, Allied Naval Forces, SWPA.

On 3 April, the POA was subdivided into three (in modern terms) theaters of operations: the North Pacific Area (above latitude 42° north); the Central Pacific Area (from north latitude 42° to the equator); and the South Pacific Area (south

of the equator and between the eastern boundary of the SWPA and longitude 110° west).⁵⁵

Nimitz took officially the post of Commander in Chief, Pacific Ocean Areas (CINCPAC) in addition to that of CINCPac at 1100 on 8 May 1942, when the battle of the Coral Sea was almost over. Nimitz was directed to appoint a commander for the South Pacific (SOPAC) Area, who, “acting under his authority and general direction, would exercise command of the combined armed forces, which at any time might be assigned that area.”⁵⁶ However, that post was not filled until 19 June 1942, when Vice Admiral Robert L. Ghormley assumed command of SOPAC. He initially established his headquarters at Auckland, New Zealand. Nimitz exercised command over all U.S. naval forces in the Pacific theater, including those in the Coral Sea, by virtue of his authority as CINCPac, but the Coral Sea itself was formally part of MacArthur’s SWPA. Nimitz and Rear Admiral Frank Jack Fletcher, Commander, Task Force 17 (CTF 17), had no control over supporting forces, such as Army Air Forces elements, which were provided by MacArthur. The resolution of this problem was that when American carriers and British or Australian forces operated in the same general area, the carrier task force commander would be in overall command. In all other cases, the senior commander, of either three nations, would be in command.⁵⁷

THE PRELIMINARIES

After the capture of Rabaul and other points in the Bismarck Archipelago, IGHQ directed the Fourth Fleet on 2 February to attack and capture “strategic areas” in British New Guinea and the Solomons as soon as possible.⁵⁸ The first operational objective was to seize the ports of Lae and Salamaua in the Huon Gulf, on the southeastern coast of New Guinea (the SR operation). On 13 February the Japanese navy and army signed an Army-Navy Local Agreement, setting execution of Operation SR for 25 February.⁵⁹ On 16 February, Inoue and Major General Tomitarō Horii, commander of the South Seas Force (or Detachment), agreed that the 2nd Battalion of the 144th Infantry Regiment, reinforced by one mountain artillery battery and other units, would attack Salamaua, while one battalion would capture Lae.⁶⁰

In mid-February, Admiral King temporarily transferred Task Force 11 (TF 11), based on the carrier USS *Lexington* (CV 2), to the ANZAC Area. Admiral Leary, together with CTF 11, Vice Admiral Wilson Brown, was planning to attack Rabaul. B-17 heavy bombers based at Townsville would strike Rabaul at the same time.⁶¹ On 20 February, TF 11 reached a point of about 350 miles south of Rabaul, where Japanese land-based aircraft detected it. In the ensuing encounters in the air the Japanese lost eighteen aircraft and the Americans only two;⁶²

however, the element of surprise had been lost, and hence the carrier attack on Rabaul was abandoned.⁶³

A major effect of this aborted raid was that Inoue decided to delay the SR operation until 8 March.⁶⁴ On 4 March, the 24th Air Flotilla started raids on Port Moresby, Lae, and Bulolo (some thirty-seven miles southwest of Lae). The next day the Japanese convoy sortied from Rabaul bound for the Huon Gulf. Two days later, the convoy split into two groups, one to Lae and the other to Salamaua. On the night of 7–8 March, the Japanese landed and quickly captured both without opposition and immediately started to build bases. By seizing control of the Huon Gulf the Japanese had obtained control of the straits between northeast New Guinea and New Britain, as well as positions from which they could support further advances to the southward.⁶⁵

Nimitz reacted strongly to the Japanese landings in the Huon Gulf by sending TF 17, centered on the carrier *Yorktown* (CV 5), and TF 11 with *Lexington* (CV 2) screened by eight cruisers and fourteen destroyers across the Coral Sea and into the Gulf of Papua. On 10 March, 104 Allied aircraft attacked Japanese shipping in the Huon Gulf from a position about fifty miles southwest of Port Moresby.⁶⁶ The Allied aircraft achieved complete surprise by approaching through the 7,500-foot pass over the Owen Stanley Range.⁶⁷ Japanese sources cited losses as four transports sunk, three ships damaged moderately and three lightly, eleven fighter aircraft lost, and 130 men killed and 245 wounded. Among damaged ships were one seaplane tender, two light cruisers, and one destroyer.⁶⁸ Allied postwar sources claim much larger Japanese losses: thirteen out of eighteen transports sunk or damaged, of which several had to return to Japan for repairs.⁶⁹ About four hundred Japanese were killed in the attack.⁷⁰ The losses in shipping could not be replaced quickly. That was one reason that Inoue decided to postpone the Port Moresby–Solomons operation for one month; another reason was increased Allied air strength over New Guinea.⁷¹

Allied and the Japanese land-based aircraft conducted sporadic attacks on each other's airfields starting in late January. The Allies raided Rabaul with small numbers of aircraft every other night from 24 January to 3 February. Allied attacks on Rabaul intensified in April. B-26 medium bombers struck on 9, 11, 12, 18, and 19 April. On the 11th and 13th attacks on Lae by a small number of medium bombers and fighters caused extensive damage, forcing the Japanese to move aircraft to Rabaul. After further raids on Rabaul on 22 and 23 April, the Allies used only two to three medium bombers, leading the Japanese erroneously to believe that the enemy's air strength at Port Moresby was greatly reduced. In fact, however, the Allies had reinforced Port Moresby, deploying additional P-39 fighters and basing B-25 bombers on Horn Island off the York Peninsula.⁷²

The 25th Air Flotilla intensified its attacks on Port Moresby in early April from Rabaul and Lae. The Japanese raids generally used only about half of a dozen land-based attack aircraft and several fighters;⁷³ for this reason, these attacks were not decisive.⁷⁴ The 25th Air Flotilla began full-scale raids on Port Moresby on 17 April, with fifteen fighters and seven attack aircraft, striking almost daily until the beginning of May.⁷⁵

JAPANESE INFORMATION ON THE ENEMY

The Japanese plans for the Port Moresby–Solomons operation were based on poor knowledge of the whereabouts and movements of enemy naval forces, the carriers in particular. This was a major reason for several decisions that caused major problems and setbacks for the Japanese in the course of the operation. Their main sources of information were visual observation by land-based search aircraft and submarines, interrogations of captured airmen, analysis of combat experience, and intercepts of plaintext messages. The Japanese, unable to decode the Allied radio traffic, lacked direct knowledge of enemy plans and intentions, but their analysis of open sources, such as the Allied broadcasts and printed media, was generally good. For sea reconnaissance, the Japanese relied on land-based medium bombers, flying boats, floatplanes, and aircraft based on ships, though rarely carriers.

The Japanese had fairly accurate information on the strength of enemy garrisons and air elements. For example, on 23 April the Fourth Fleet estimated correctly that Tulagi had a small garrison but that Port Moresby was defended by about five thousand troops. The Japanese assessed (again correctly) that Allied air strength in Australia had been increased, to probably two hundred first-line aircraft. They knew that the Allies had concentrated air strength in the Port Moresby, Port Darwin, and Townsville areas and that air activity in those areas was intense.⁷⁶

However, the Japanese had very poor knowledge of the overall strength of enemy forces in the southern and southwestern Pacific. Their single greatest mistake was to assume, in the absence of information to the contrary, that “there was little probability of the existence of a powerful force in the area after the withdrawal of U.S. carrier force.”⁷⁷ Yet they also believed that it was “not unlikely that the enemy might conduct their own operations against our South Seas Fleet operational area east or south. The only U.S. carrier believed to be in the area is the *Saratoga*.”⁷⁸ These estimates were based on information from a Japanese picketboat that the Americans had employed three carriers in their raid on Tokyo on 18 April. However, from interrogations of captured pilots the Japanese learned that only two carriers (*Enterprise* and *Hornet*) had taken part. This meant, they assessed, that two others, *Yorktown* and *Saratoga*, were available

—they erroneously believed that *Lexington* had been sunk by a Japanese submarine in January 1942. They did not know that *Saratoga* had sustained damage and was under repair. In any case, having observed no enemy carriers in the southern area since 10 March, the Japanese assumed that only one large carrier (*Saratoga*) would be operating there. They believed that the Royal Navy might have in Australian waters a battleship, two or three heavy cruisers, one light cruiser, and several destroyers. They also assumed that “even if the enemy’s submarines are not particularly active, there is a strong chance that at least two or three would operate in the area.”⁷⁹

JAPANESE PLANS AND PREPARATIONS

Inoue, of the Fourth Fleet, and his staff were primarily responsible for planning the employment of naval forces and Base Air Forces (i.e., naval land-based aircraft) in the southwest and south. General Horii, commander of the brigade-sized South Seas Force, and his staff planned for the army troops. In connection with the high-level strategic debates discussed above, an IGHQ directive of 29 January had stipulated that Port Moresby and Tulagi should be seized immediately after Lae and Salamaua. That is, the Port Moresby–Solomons operation would be executed in March 1942, supported by land-based aircraft from Rabaul and seaplanes from newly constructed bases in Lae, Salamaua, and Finschafen.⁸⁰ The original assumption that the enemy would have no carriers in the area became invalid in the light of the raids of February and March 1942 and growing enemy air strength in Australia. As we have seen, in Inoue’s view the capture of Port Moresby and Tulagi would entail much more risk than initially envisaged and would need strong support by the large carrier force. However, Yamamoto needed all five large carriers (*Kaga* had been damaged in a grounding in February 1942) and four battleships for raids against Ceylon and in the Bay of Bengal in early April (Operation C).⁸¹

Inoue sent a message to the Combined Fleet on 20 March pointing out that considering the experience of the Lae–Salamaua operation, especially the appearance of the enemy carrier force, “it would be very difficult to assign protection for the transport convoy by land-based air units, and to protect the airbase establishment and the landing point after disembarkation.” He continued, “I would like to see discussion during a central agreement to doubly ensure the strengthening of land-based air units and the cooperation of a fully equipped aircraft carrier for the coming operation.” The carrier *Shōhō* (14,200 tons full displacement) currently assigned for the operation to the Fourth Fleet was not sufficient in itself.⁸²

Final plans for the Port Moresby–Solomons operation were developed by the Fourth Fleet and subordinate commanders during April 1942. The plans were

considerably affected by Yamamoto's decisions regarding the timeline of the Midway-Aleutians operation and the availability of carriers. The Fourth Fleet also depended on the Combined Fleet for additional cruisers and destroyers and land-based naval aircraft.

On 5 April, Admiral Ugaki, the Combined Fleet chief of staff, circulated an outline of organizational changes based on IJN Directive No. 86. Among other things, the Port Moresby operation, to be code-named "MO Operation," would take place in early May, prior to the Midway-Aleutians operation. From 20 April to 10 May the Combined Fleet would attach to the Fourth Fleet the large carrier *Kaga*, one seaplane tender, Cruiser Division (CruDiv) 5 (*Haguro* and *Myōkō*), CruDiv 6 (*Aoba*, *Kinugasa*, *Kako*, and *Furutaka*), and Destroyer Divisions 7 and 27.⁸³ Inoue also learned that 24th and 25th Air Flotillas would return to the direct control of the 11th Air Fleet commander, Vice Admiral Tsukahara.⁸⁴ In addition, the Combined Fleet attached the light carrier *Shōhō* from the 4th Air Flotilla to the Fourth Fleet; until then it had been used only for ferrying aircraft. Initially scheduled to take effect on 10 May, the command changes were later advanced to 20 April.⁸⁵

Also on 5 April, Yamamoto directed Inoue that all plans for the Fourth Fleet had to be completed by 10 May. It was this change, combined with the advance of the date for the execution of the Midway-Aleutians operation to early June, that had made it impossible to provide the frontline, large-carrier division Inoue had been promised in March. Inoue had been a strong opponent of the Midway operation, because the Fourth Fleet would have to garrison and supply the island after its capture.⁸⁶ He was now even more distressed that only one large carrier would be assigned to the MO operation and asked the Combined Fleet to reconsider. Inoue specifically requested that Carrier Division 2 (CarDiv 2) (*Sōryū* and *Hiryū*) be assigned to the operation, in addition to *Kaga*; CarDiv 2 was considered one of the most effective formations in the entire navy. Another problem with the schedule was that the 25th Air Flotilla would not have sufficient time to neutralize air opposition in the area prior to the start of the operation; its major components would not be ready for combat until 20 April.⁸⁷

Yamamoto, however, was reluctant to assign CarDiv 2 to the Fourth Fleet. That division, together with CarDiv 1, would be part of the pending Midway-Aleutians operation. Also, both carrier divisions needed refitting and training upon their return from the Indian Ocean. Yamamoto therefore decided on 10 April to allocate to the South Seas Fleet CarDiv 5, composed of the new carriers *Shōkaku* and *Zuikaku*, plus two destroyer divisions. However, CarDiv 5 was the least experienced carrier unit in the Combined Fleet. This order became effective on 18 April.⁸⁸

The Fourth Fleet's planners considered three options for seizing Port Moresby: a land approach over the Owen Stanley Range, a "barge mobilization," and a standard landing operation. Capturing Port Moresby by advancing overland was feasible if a road were built over difficult mountainous terrain. Some army commanders preferred this option to the risks of troops embarking on ships, which could be sunk.⁸⁹

"Barge mobilization" meant landing troops in the southeastern part of New Guinea and then transporting them to Port Moresby by self-propelled barges to successive points along the coast. These landings would be conducted during the night to reduce the threat of the enemy's air attack. The Japanese estimated that, at an average advance of sixty-eight miles each night, they would need about five days to reach Port Moresby. The problem was that the sea route to Port Moresby was navigationally very difficult, due to reefs and other obstacles; the barges would have to travel far from the shore. Barge mobilization would have been extremely difficult, but Inoue believed it feasible. Hence, in early April he directed studies for transportation of food and munitions, embarkation rosters, cooking arrangements, etc.⁹⁰ But in the end a standard landing was adopted, despite high risks for the convoy and covering forces; the strengthening of the Fourth Fleet had given its planners increased confidence.⁹¹

The Japanese conducted extensive reconnaissance of the area of Port Moresby and the seas routes from Rabaul westward and southward. The army commander had asked the navy to obtain photographs of the landing area at Port Moresby and the sea area between there and the island of Samarai, in the China Strait. Army officers accompanied reconnaissance flights over the landing area, after 10 April.⁹² Yet after numerous reconnaissance and photographic flights, the Japanese acknowledged that they still lacked accurate information on facilities and enemy strength.⁹³

As the Japanese usually did in preparing for amphibious landings, the 24th Air Flotilla in March conducted reconnaissance flights over the projected route to determine the best sites for seaplane bases; the 25th Air Flotilla did the same in mid-April. The Japanese surveyed waterways east of Australia, confirmed the accuracy of charts, reconnoitered airfields on Horn Island off Cape York in northern Australia, and photographed both landing sites at Port Moresby and potential barge routes.⁹⁴ For some of these purposes the Japanese used short-range, single-float, reconnaissance biplanes that operated from shore bases established by tenders or from the tenders themselves.

On 16 April, Inoue convened a two-day staff meeting to discuss the plan and arrange final orders. Many subordinate commanders voiced strong misgivings. One major problem was the vulnerability of the MO Invasion Force along the

southern coast of Papua New Guinea; enemy air bases were only about three hundred miles away, and swift currents and numerous islands surrounded by reefs severely interfered with the passage of ships.⁹⁵

The MO Invasion Force had three main routes available: the 670-mile-long westward route via the China Strait; a 950-mile route passing eastward around the Louisiades; and an 840-mile route southward through the Louisiades via the Jomard Passage and then across the Coral Sea to Port Moresby. The route through the China Strait was the shortest and ran mostly over deep water; it was also least exposed to the enemy air attacks. However, ships would have to sail in a single column. The eastward route was free of navigational obstacles but was 110 miles longer than the southward route; it was also more exposed to attack by the enemy submarines. The southward route was less navigationally difficult than going westward and more secure than the eastward route; planners adopted it as a compromise.⁹⁶

The plan was to organize the convoy of ships, five from the army and six from the navy. The convoy, after departing from Rabaul, would run through St. George's Channel and then south-southwest, turn southwest, and when eastward of Woodlark Island (Muyua today) head toward Deboyne Island, and then enter the Coral Sea through the Jomard Passage, some 420 nautical miles southward from Rabaul. Afterward, and for the remainder of its advance to the landing objective, the convoy would be open to attack by the enemy aircraft based at Townsville and Cooktown. The planners calculated that if the Jomard Passage was navigated during the evening and a constant speed of eleven knots was maintained, the convoy would be exposed to attack in the Coral Sea for the next twelve hours.⁹⁷ Hence, it was critical to obtain local sea control in the Coral Sea by the MO Carrier Force. The basic idea for doing so was to send the MO Carrier Force sweeping around to the east of the Solomons (to avoid the enemy air searches) to enter the Coral Sea from the southeast, as the MO Main Force passed to the westward (see sidebar, "Japanese Order of Battle, May 1942").⁹⁸

The Japanese planners also grappled with the problem of the barrier reef fronting Port Moresby. The reef is a natural fortress, running along the coast from the eastern tip of New Guinea to Port Moresby, at the distance of from two to ten miles. Passage by landing craft was impeded at both low and high tides. Outside Port Moresby the large Sinavi and Nataera Reefs must be penetrated, by three possible routes: the Liljeblad Passage, the Basilisk Passage, and the Padana Nafua. The Liljeblad Passage was within firing range of the Pafa Coast Defense Battery south of Port Moresby, the current is swift, and sunken reefs lie in the passage and en route to harbor. This route was unsuitable for a large landing

Continued on page 113

JAPANESE ORDER OF BATTLE, MAY 1942

CINC, COMBINED FLEET: ADM. ISOROKU YAMAMOTO

COMMANDER, FOURTH FLEET (SOUTH SEAS FLEET): VICE ADM. SHIGEYOSHI INOUE

(FLAGSHIP CL *KASHIMA*, RABAU)

MORESBY (MO) MAIN FORCE

(Vice Adm. Aritomo Gotō, Commander, CruDiv 6)

CruDiv 6 (4 CAs—*Aoba*, *Kako*, *Kinugasa*, *Furutaka*)

DesDiv 7 (1 DD—*Sazanami*)

Light Carrier (*Shōhō*)—12 A6M Zero fighters and 9 B5N Type 97 [Kate] torpedo bombers)

TULAGI INVASION FORCE

(Rear Adm. Kiyohide Shima, Commander, CruDiv 19)

CruDiv 19 (1 CM—*Okinoshima*, minus *Tsugaru* and *Tokiwa*)

DesDiv 23 (2 DDs—*Kikuzuki*, *Yūzuki*)

2 Transports (*Azumasan Maru*, *Kōei Maru*)

Minesweeper Flotilla 14 (*Hagoromo Maru*, *Noshiro Maru* No. 2)

2 Special Minesweepers (*Wa* No. 1, *Wa* No. 2)

SC Squadron 56 (*Toshi Maru* No. 3, *Tama Maru* No. 8)

Base Units (400 men of Kure 3rd Special Unit, part of the 7th Construction Bn., two 80 mm AA guns of 3rd Base Unit, one 130 mm MG of 3rd Base Unit, two 80 mm AA guns of 8th Base Unit)

MORESBY (MO) INVASION FORCE

(Rear Adm. Sadamichi Kajioka, Commander, Torpedo Squadron 6)

Torpedo Squadron 6 (1 CL—*Yūbari*)

DesDiv 29 (2 DDs—*Oite*, *Asanagi*)

DesDiv 30 (3 DDs—*Mutsuki*, *Mochizuki*, *Yayoi*)

DesDiv 23 (1 DD—*Uzuki*, minus *Yūnagi*, *Kikuzuki*, and *Yūzuki*)

1 Repair Ship (*Ojima*)

1 Special Minesweeper (*Wa* No. 20)

TRANSPORT UNIT

(Rear Adm. Kōsō Abe)

1 CM (*Tsugaru*)

11 transports: 5 navy (*Mogamigawa Maru*, *Akihasan Maru*, *Chōwa Maru*, *Goyō Maru*, *Shōkai Maru*), 6 army (*China Maru*, *Daifuku Maru*, *Asakayama Maru*, *Matsue Maru*, *Mito Maru*, *Nichibi Maru*)

South Seas Force (5,000 men)

Base Units (embarked; some 500 men of 3rd Kure Special Naval Landing Force, 10th Construction Section, four 120 mm AA guns and two 80 mm AA guns of 8th Base Unit, two 80 mm of 4th Base Unit, part of the Base Unit—Communication Personnel, Transportation Section)

MORESBY (MO) SUPPORT FORCE (COVERING FORCE)

(Rear Adm. Kuninori Marumo, Commander, CruDiv 18)

CruDiv 18 (2 CLs—*Tenryū*, *Tatsuta*)

2 AVs (*Kiyokawa Maru*, *Kamikawa Maru*)

Gunboat Division 5 (2 XAVPs—*Nikkai Maru*, *Keijō Maru*)

1 Transport (*Shōei Maru*)

Minesweeper Flotilla 14 (*Hagoromo Maru*, *Noshiro Maru* No. 2)

Base Units (part of Kure 3rd Special Unit, part of the Communication Personnel of 8th Unit)

MORESBY (MO) CARRIER FORCE

(Vice Adm. Takeo Takagi, Commander, CruDiv 5)

CruDiv 5 (2 CAs—*Myōkō*, *Haguro*, minus *Nachi*)

CarDiv 5 (5th Air Flotilla), Rear Adm. Chūichi Hara, Commander (2 CVs—*Zuikaku*, *Shōkaku*)

(*Shōkaku*—21 A6M Zero fighters, 20 D3A Type 99 [Val] dive-bombers, 19 B5N Type 97 [Kate] torpedo bombers)

(*Zuikaku*—21 A6M Zero fighters, 21 D3A Type 99 [Val] dive-bombers, 20 B5N Type 97 [Kate] torpedo bombers)

DesDiv 27 (4 DDs—*Shigure*, *Yūgure*, *Ariake*, *Shiratsuyu*)

DesDiv 7 (1 DD—*Shioakebono*, minus *Sazanami*)

1 Fleet Tanker (*Tōhō Maru*)

VICE ADM. TERUHISA KOMATSU, COMMANDER, SIXTH FLEET

SUBMARINES

(Capt. Mitsunage Iwagama)

Eastern Detachment, SubRon 8 (Patrol/Scouting Group) (*I-21*, *I-22*, *I-24*, *I-28*, *I-29*)

SubGru 21 (Raiding Force) (*RO-33*, *RO-34*)

SUPPLY FORCE

2 Fleet Tankers (*Ishirō*, *Hōyō Maru*)

BISMARCK AREA (R) DEFENSE FORCE

(Rear Adm. Masao Kanazawa, Commander, 8th Base Unit)

8th Signals Unit

8th Submarine Base Force

81st Garrison Rabaul Unit

Gunboat Div 5 (*Seikai Maru*)

SC Div 56 (*Kotobuki Maru No. 5*)

MO INVASION ARMY UNITS

(Maj. Gen. Tomitarō Horii)

144th Infantry Regt.

1st Co., 55th Cavalry Regt.

1st Bn., 55th Mountain Engineer Regt.

2nd Co., 47th Mobile AA Bn.

6 Army Transports (part of the MO Invasion Force)

25TH AIR FLOTILLA (5TH AIR ATTACK FORCE)

(Rear Adm. Sadoyashi Yamada, Commander, 25th Air Flotilla)

1st Force (Tainan Air Group, at Rabaul, Lae) (18 Zero and 6 Type 96 fighters)

2nd Force (4th Air Group, at Rabaul, Lae) (17 Type 1 land-attack bombers)

3rd Force (Motoyama Air Group, at Rabaul) (26 Type 96 land-attack aircraft)

4th Force (Yokohama Air Group, at Tulagi, Shortland Island, Deboyne Island) (12 Mavis reconnaissance aircraft, 9 Zero Model 21 fighters)

Special Duty Force (1 AV—*Mogamikawa Maru*)

NAURU AND OCEAN ISLAND INVASION FORCE

(Rear Adm. Kiyohide Shima, Commander, CruDiv 19)

CruDiv 19 (*Okinoshima*, *Tsugaru*, minus *Tokiwa*)

DesDiv 23 (2 DDs—*Kikuzuki*, *Yūzuki*)

2 Transports (*Kinryū Maru*, *Takahata Maru*)

6th Base Naval Landing Party

Kashima Naval Landing Party

1 CL (*Tatsuta*); 1 CM (*Tsugaru*) (after 11 May)

Sources: Bates et al., *Battle of the Coral Sea*, app. 1, p. 8; *Japanese Army Operations in the South Pacific Area*, pp. 53, 56–57.

force. The Basilisk Passage was a standard waterway but was in the direct line of fire from coastal batteries. The Padana Nafua route avoided these problems and was considered by the planners the most favorable.⁹⁹

There was also the problem of sustaining troops once they landed. The Port Moresby area, poor in water resources, relied on rainwater; it was estimated that only four or five thousand troops could be stationed there.¹⁰⁰ Supplies would have to reach a Japanese garrison by a long and vulnerable sea route either from Rabaul or the Huon Gulf or over the Owen Stanley Range. The ever-increasing enemy air strength in northern and eastern Australia would make it difficult for the Japanese to hold Port Moresby even if the landing was successful.

On 23 April, Inoue issued Order No. 13 as the basic directive for MO.¹⁰¹ It directed the South Seas Fleet and the South Seas Force to seize Port Moresby, important positions in southeastern New Guinea, and Tulagi Island in the lower Solomons; to establish air bases; and to intensify air operation around Australia. The services reconciled differences in a new Army-Navy Local Agreement on 25 April, and details were worked out by 3 May.¹⁰² On 28 April IGHQ issued directives for the execution of the operation. For the Japanese high command, the overall strategic objective remained isolation of Australia from the United States and other Allies. The capture of Port Moresby and Tulagi would be followed by the occupation of important points in New Caledonia, Fiji, and Samoa. From these new bases, the Japanese aircraft and submarines would interrupt, if not cut off entirely, the flow of the enemy's troops and matériel to Australia and prevent it from becoming a base for a counteroffensive.¹⁰³

On 28 April, Vice Admiral Takeo Takagi, commander of the MO Carrier Force, issued orders to his forces. As directed by Inoue, his order included strikes against the enemy's bases in northeastern Australia. Rear Admiral Hara, commander of CarDiv 5, was very dissatisfied with the role assigned to his carriers. He was especially critical of the task of conducting strikes against the enemy's bases in northeastern Australia. In his view, it was too risky to operate carriers within the effective range of the enemy land bases. Another problem was the presence of reefs and other navigational hazards in the area, which would limit the maneuvering area for his carriers. Logistical sustainment under way was also inadequate, because only a single fleet oiler was assigned to CarDiv 5 and its destroyers. On 29 April, Inoue modified his order and left to Takagi's discretion whether to attack enemy air bases or not. Takagi was allowed to cancel the planned strikes if he failed to achieve surprise. However, the same day, Yamamoto directed Inoue to cancel all strikes on northeastern Australia. The MO Carrier Force was to focus exclusively on the enemy carriers, while attacks on Australia's mainland were to be conducted by naval land-based aircraft. On 30 April, Inoue formally canceled strikes on the Allied airfields in northeastern Australia. At the same time he directed Takagi that

CarDiv 5 was to embark eighteen A6M Zero fighters for the 25th Air Flotilla and ferry them to Rabaul.¹⁰⁴

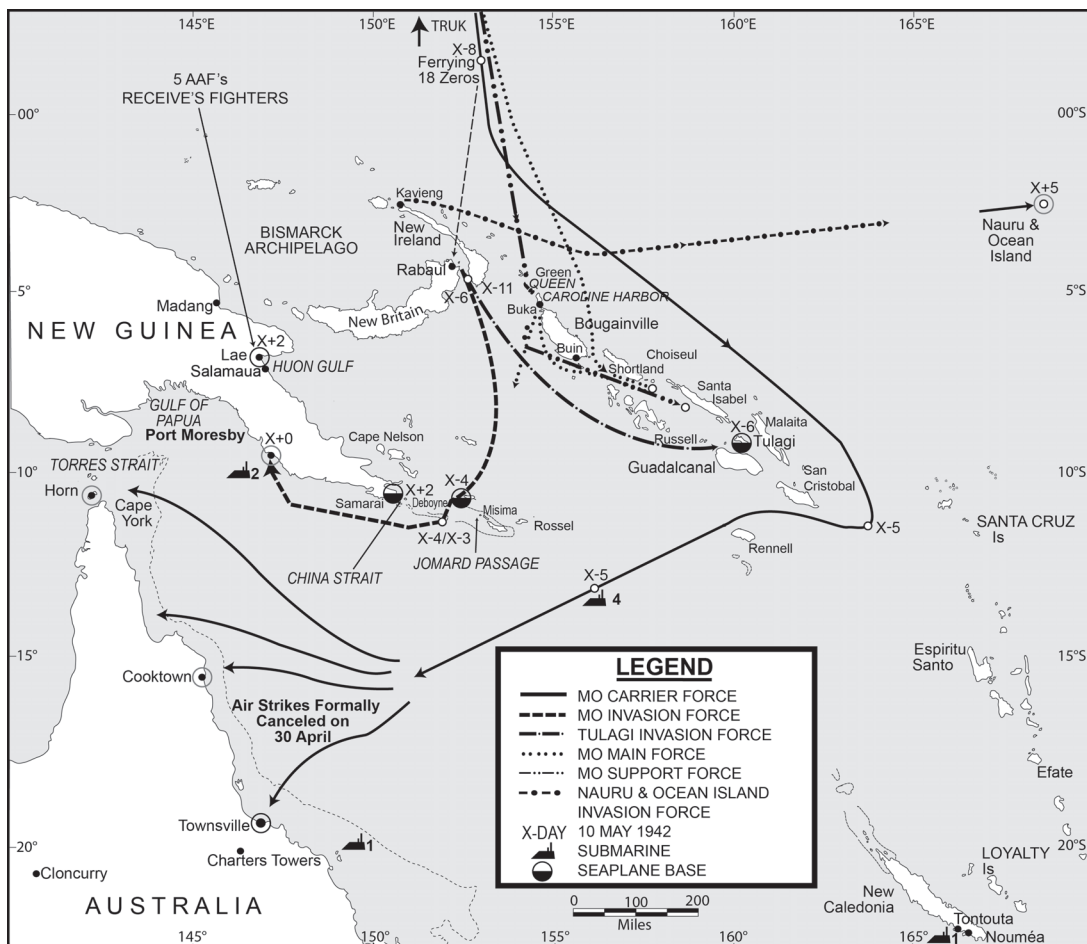
Inoue's plan was extremely complex (see map 2). The Fourth Fleet planners assumed that the enemy commander would be aware of the movements of the Port Moresby Invasion Force and would deploy a force into the Coral Sea to intercept it. The Japanese took as granted, however, that they would achieve surprise. Objectives and events were sequenced with little consideration for potential difficulties arising from long distances, poor radio communications, bad weather, or unforeseen events. The most fateful mistake by the Japanese, one that would be repeated on many occasions in the Pacific War, was the assumption that the enemy would passively accept the Japanese narrative and react in a preordained way.¹⁰⁵

The capture of Port Moresby was the principal and ultimate objective of the entire operation. It was an *operational* objective, in terms of its scale. The Japanese believed that by controlling Port Moresby they would deny the enemy a major air base within effective range of Rabaul. From Port Moresby the Japanese could dominate the whole of New Guinea and threaten northern Australia.¹⁰⁶ It would help secure Lae and Salamaua from the enemy's air attack. For its part, the Combined Fleet believed that MO operation could force the U.S. Pacific Fleet to respond, thereby setting a trap for its destruction.¹⁰⁷ However, there was a serious mismatch between ends and means. Even if successful, the Japanese clearly lacked sufficient air strength to counter the growing Allied air capabilities in northeastern Australia. Enemy aircraft would be still able to attack Japanese forces in the western Coral Sea.¹⁰⁸

The capture of Tulagi was a supporting and major *tactical* objective. A seaplane base there would protect the left flank of Japanese forces moving to seize Port Moresby. It would allow the Japanese to extend their search coverage farther eastward. Also, the Japanese believed, a seaplane base at Tulagi would make it difficult for the enemy to conduct reconnaissance from Nouméa and Port Moresby to track Japanese movements.¹⁰⁹ The Japanese, in contrast, would be able to search east of the Solomons and over the eastern Coral Sea. The plan also envisaged the capture of Samarai Island, as the key to controlling the China Strait.¹¹⁰

The Japanese made a major error in trying to capture Tulagi and Deboyne Island (where a seaplane base would be established) in the course of the operation. It might have been better to do so beforehand, making the MO operation itself simpler and more executable. However, the single greatest error in the designing of the Port Moresby–Solomons operation was failure to initially obtain local control in the Coral Sea. The main prerequisite of success was the destruction or serious weakening of the enemy's operational center of gravity, his carrier force; only after that was accomplished would the other objectives have been achievable.

MAP 2
JAPANESE OPERATIONAL IDEA (SCHEME)



Instead, the Japanese believed that all force elements could be deployed and sent to the objective area almost simultaneously.

In addition, the plan for logistical sustainment of naval forces was inadequate.¹¹¹ The supply group consisted of only two fleet oilers (some sources say three). In addition, only one fleet oiler was assigned to the MO Carrier Force. This greatly increased the time required for the carriers to refuel at sea and thereby made them more vulnerable to enemy submarine and air attack.

Unity of command in Japanese army-navy operations was rare: separate command of army and naval units was the general practice; the Port Moresby–Solomons operation was an exception. Inoue exercised formally full command and control over all navy and army forces. Under him, Vice Admiral Aritomo Gotō commanded all the invasion forces, and Major General Horii the army

occupation units. However, the majority of naval units did not belong organically to the Fourth Fleet. The navy's land-based aircraft were subordinate to Admiral Tsukahara, commander of the 11th Air Fleet, and the submarines were under control of Vice Admiral Teruhisa Komatsu, commander of the Sixth Fleet. CarDiv 5 and CruDiv 5 were temporarily under Inoue's command; by the end of May 1942 they were scheduled to return to their organic forces.¹¹² Vice Admiral Takeo Takagi was the commander of the MO Carrier Force. However, because he had little experience in air operations, Rear Admiral Chuichi Hara was in tactical command of CarDiv 5.¹¹³

Inoue and his planners divided available seagoing forces into nine elements for the Port Moresby–Solomons operation and one for the separate Nauru–Ocean Island operation. A short timeline meant that several units had to be assigned multiple tasks (sidebar 1).¹¹⁴ The rationale was speed of execution, but it meant that the entire force was fragmented and its overall strength was greatly weakened. Finally, though the outcome of the entire operation hinged on achieving surprise, there was no deception plan.

The MO operation was to be completed within twelve days, from the first force deployment to the landing at Port Moresby. No flexibility was incorporated to provide for delays due to unforeseen events or enemy actions. Specifically, the landing at Port Moresby would take place on 10 May (X-day). Tulagi would have been captured on X–7 (3 May). Seaplane bases would be established at Tulagi on X–6 (4 May), on Deboyne Island on X–4 (6 May), and on Samarai on X+2 (12 May). Naval construction troops would repair the airfields and receive the fighters of 5 AAF at Lae on X+2 (12 May). The Nauru–Ocean Island Invasion Force, sailing out of Kavieng, would seize these two islands on X+5 (15 May).¹¹⁵

The initial task of the MO Main Force was to provide distant cover for the Tulagi landing.¹¹⁶ Inoue wanted the light carrier *Shōhō* to be part of the MO Carrier Force. However, at the insistence of General Horii, who was worried about inadequate AA defense of the MO Invasion Force, *Shōhō* was assigned to the MO Main Force.¹¹⁷ The Japanese apparently believed the Allies could react strongly to the capture of Tulagi and that the MO Main Force could be positioned some 150 miles west of Tulagi, so as to cover either Tulagi or the MO Invasion Force. In any case, Gotō's force was not strong enough to defend either force against the determined attack by enemy carriers.¹¹⁸ The MO Support Force (also called the Moresby Escort Fleet) was to support both Tulagi and Port Moresby landings.¹¹⁹ In addition, it would construct seaplane bases on Deboyne and Samarai Islands.¹²⁰

The *Zuikaku* and *Shōkaku* carrier groups were organized as a single force, thereby greatly increasing their offensive capabilities.¹²¹ The principal task of the

MO Carrier Force was to provide distant cover and protection to the MO Invasion Force and destroy the enemy fleet if it appeared.¹²² However, it was also to pass within 350 miles of Rabaul to ferry eighteen Zero fighters there on X-8 (2 May).¹²³ Afterward, it would sail east of the Solomons, provide direct support to the Tulagi Invasion Force, and then on X-5 (5 May) (one day after the flying boats started to use the Tulagi base) enter the Coral Sea eastward of the Solomons to support the MO Invasion Force as required. If a strong enemy force was detected, the MO Carrier Force was to attack and destroy it; otherwise, it would prepare for a decisive encounter while protecting the MO Invasion Force. After the landing at Port Moresby, the MO Carrier Force would remain five more days in the area to counter the appearance of a powerful enemy naval force in the Coral Sea.¹²⁴

Most submarines that took part in the Port Moresby–Solomons operation belonged to the “Eastern Detachment” of Submarine Squadron 8 (SubRon 8). These submarines were planned to leave for Truk in mid-April.¹²⁵ The task of SubRon 8 was “to prepare for the enemy fleet, deploy, and wait for the enemy.”¹²⁶ On X-5 (5 May), four submarines from SubRon 8 would establish a scouting line about 285 miles southwest of Guadalcanal to intercept an enemy force passing from Brisbane and Sydney toward Tulagi. Also, one submarine would patrol off the eastern Australian coast and another near Nouméa.¹²⁷ Two submarines of SubGru 21 (or Raiding Force) would reconnoiter the approaches to Port Moresby, attack enemy ships, and guide the invasion convoy to the outer harbor.¹²⁸

Though execution of the operation was to be almost simultaneous, the actual departures of forces taking part were staggered; basing areas were widely separated, distances to the objective areas were long, and speeds of advance varied greatly. The Tulagi Invasion Force and the MO Support Force would sail on 29 April from Rabaul and Truk, respectively. The MO Main Force would leave Truk on 30 April, and the MO Carrier Force would sortie from Truk the next day. The MO Invasion Force would sail from Rabaul on 4 May.¹²⁹

INFORMATION AVAILABLE TO THE ALLIES

The U.S. Navy’s communications intelligence (COMINT) was the principal source of intelligence on the IJN at the beginning of the war in the Pacific. In the spring of 1942, three centers analyzed Japanese radio traffic, all regularly exchanging data to assist each other in traffic analysis, call-sign recovery, and the deciphering of messages. In Washington, D.C., was Section G, the “Communication Security Section” (code name NEGAT), within the Office of Naval Communications. The other two stations—HYPO (or Fleet Radio Unit Pacific [FRUPAC]), at Pearl Harbor, and BELCONNEN (or Fleet Radio Unit Melbourne [FRUMEL])—served the Allied commands in the Pacific. On the CNO staff,

Op-20G, the Navy Radio Intelligence Section, was responsible for integrating all COMINT on the IJN.¹³⁰

All three COMINT stations in the Pacific focused on intercepting and decoding radio messages sent in the IJN's *Naval Codebook D*, or JN-25, cryptographic system. About half the high-level communications in the IJN used JN-25. In April 1942, the IJN planned to issue a new *Naval Codebook D*. However, delays in distribution postponed the changeover first to 1 May, and eventually to 27 May.¹³¹ Had it gone over to the new edition as originally scheduled, U.S. cryptanalysts would have been in the dark for many weeks at a critical time.

COMINT was the single most valuable source of accurate and timely information on the enemy's intentions for Admirals King and Nimitz and the major naval commanders in the Pacific. This information was especially critical early in the war, when the Allies were numerically inferior to the Japanese. Timely information on where the Japanese carrier forces were allowed Nimitz and King to employ carrier forces for raiding newly acquired Japanese positions.¹³² It would soon allow timely deployment of carrier groups to thwart major Japanese thrusts, notably in the Coral Sea and at Midway. MacArthur relied less on COMINT than did Nimitz and King and far more on visual reconnaissance, both aerial and from coastwatchers.¹³³

The Allied cryptanalysts read and decoded a large number of IJN messages in the spring 1942 that were directly or indirectly related to Japanese plans for the Second Operational Stage of the war. On 29 January, the Allies decoded the first messages indicating that the Japanese were conducting searches south of Rabaul;¹³⁴ in February, the COMINT centers in Hawaii, in Melbourne, and on Corregidor issued warnings to King, Nimitz, and Admiral Thomas C. Hart, commander of the Asiatic Fleet. Admiral Leary, commander of the ANZAC Area, received warnings of the Japanese future operations in the direction of Lae, Port Moresby, and the Solomons. Collectively, these warnings convinced Nimitz in late February that a Japanese offensive was planned for the Port Moresby area. Within a week, U.S. task forces were alerted.¹³⁵

The first specific indication of the pending operation against Port Moresby was a decoded Japanese message of 25 March: "All attack forces continue operations in accordance with [an unidentified message reference]. . . . On 26th #2 (Air) Attack Force continues to support main task and using fighters assist #5 (Air) Attack Force in RZP campaign and with scouts carry out patrol in your assigned area. #5 (Air) Attack Force continue attacks on RZP and . . . and carry out patrol in your assigned area."¹³⁶ Cryptanalysts tentatively located "RZP" in the Port Moresby area. Initially, they believed that both RZP and RZQ referred to the Port Moresby area; later they concluded that RZQ was a seaplane base in Port Moresby and RZP was the town itself.¹³⁷

Reportedly, Allied analysts were able to read all the Japanese messages in April and May 1942. They were able gradually to discern Japanese intentions from the movements of various naval and air units and arrivals at Truk and Rabaul. They received such a vast number of messages that even without decoding them all, they gave Nimitz warning in time to move carrier forces into the Coral Sea.¹³⁸

The Allied cryptanalysts learned on 5 April about the Combined Fleet's assignment of *Kaga* to the Fourth Fleet; *Kaga* was an addressee in communications between Fourth Fleet and the Combined Fleet regarding the Port Moresby operation. Within a few days cryptanalysts linked *Kaga* and the "RZP campaign," understood to refer to Port Moresby. On 10 April, the Allied COMINT deduced that *Kaga* and a new *Shōkaku*-class light carrier, identified erroneously as *Ryukaku* (actually the small carrier *Shōhō*) could be used for offensive operations.¹³⁹ It was estimated that all the available enemy large carriers were then in the Indian Ocean and that it would be several weeks before any large carriers would be available to the South Seas Fleet.¹⁴⁰

On 17 April, the Australian Combined Operational Intelligence Centre (established on 5 March 1941) in Melbourne outlined "indications of an imminent move by Japan against Australian territory." It concluded that the enemy intended to carry out an offensive from the Truk–New Britain area, probably during the first week of May, with the major objective of seizing control of the New Guinea–Torres Strait area, involving the occupation of Port Moresby. The report estimated that the Japanese naval forces for the pending offensive would consist of two or three aircraft carriers (*Zuikaku*, *Shōkaku*, and "*Ryukaku*"), five heavy cruisers, four light cruisers, twelve destroyers, and a submarine force.¹⁴¹

MacArthur's intelligence section was very skeptical about Japanese intentions against Port Moresby. On 21 April, Colonel Charles A. Willoughby, MacArthur's assistant chief for intelligence, prepared for his chief of staff, Lieutenant General R. K. Sutherland, a status report based on (but not attributed to) COMINT from Melbourne. Willoughby questioned the navy's view of the reported Japanese naval and ground-based air strength in the Fourth Fleet area. He believed the buildup posed more of a threat to the coast of Australia and New Caledonia than to Port Moresby.¹⁴²

The Allies learned on 25 April that reinforcements continued to arrive at New Britain. The units of Gunboat Division 8 were en route from Sasebo to Rabaul.¹⁴³ On 26 April American analysts deduced that three carriers—"Ryukaku," *Zuikaku*, and *Shōkaku*—were en route to Truk and would arrive there about 26 April.¹⁴⁴ On 27 April, the commander of the Fourteenth Naval District (COM 14, with headquarters at Pearl Harbor) believed that air reinforcements for New Britain would arrive from the Marianas and Marshalls in the immediate future. There were more indications that CarDiv 5 and CruDiv 5

(less *Nachi*) and destroyers would operate southward of Truk.¹⁴⁵ On 28 April, COM 14 learned that the Fourth Fleet had directed four units to join another group to search for and engage the enemy eastward of New Britain. The analysts believed that this other force consisted of units from CruDivs 6 and 18, strengthened by at least one carrier, “*Ryukaku*,” and perhaps two heavy cruisers of CruDiv 5.¹⁴⁶

The main sources for tactical (as opposed to strategic and operational) intelligence were the reports of land-based reconnaissance aircraft based in north-eastern Australia and at Port Moresby, flying boats at Nouméa, submarines, and the coastwatcher service. SWPA aircraft flew flank-reconnaissance patrols around Thursday Island, Port Moresby, and Rabaul. They also extensively reconnoitered the Solomon Islands and the area southeastward to the boundary of the Southwest Pacific Area, and the Solomon Sea west of Tulagi. In addition, SWPA’s aircraft patrolled from Buna, southeastward along the north coast of New Guinea and the Louisiades, and then westward, south of the Louisiades, to Port Moresby. The area around Townsville was patrolled out to five hundred miles. Allied search aircraft conducted routine patrols across the mouth of the Gulf of Carpentaria and off the Darwin area. SWPA bombers and fighters at Port Moresby also often conducted photographic and armed reconnaissance around Salamaua, Lae, Madang, Gasmata, and Buna. After 1 May, however, no searches of the area east of the Solomon Islands were conducted, either by the RAAF from Tulagi or by the AAF in Australia or at Port Moresby.¹⁴⁷

The coastwatcher service was organized by the Royal Australian Navy (RAN) in 1939. It used officials of local administration and civilian residents to report on shipping movements and other unusual activities along some 2,485 miles of coast in Australian New Guinea, the Admiralties, the Bismarck Archipelago, the Solomons, and the New Hebrides.¹⁴⁸

The Allies had relatively good knowledge of the Japanese air facilities and air strength in the newly occupied areas of eastern New Guinea, the Bismarck Archipelago, and the Solomons. They estimated (inaccurately) that on 25 April the Japanese had sixty-eight aircraft (fourteen fighters, forty bombers, and fourteen patrol aircraft) deployed in Rabaul and about twenty-four aircraft (all fighters) at Lae.¹⁴⁹

Subordinate to Nimitz was the seaplane tender *Tangier* at Nouméa; it had six Catalinas available for search. From 1 through 4 May, they flew daily patrols in a northwesterly sector out to seven hundred miles. Because of their small number, the Catalinas could search only once a day. This was not sufficient to ensure detection of enemy forces entering the Coral Sea from the eastward around San Cristobal Island or through any of the passages northwestward of that island. Had the Catalinas redeployed to or staged through Efate, their effective search

could have been extended up to 180 miles on the western leg, far enough to include Tulagi, and 210 miles on the eastern leg, covering seventy-five miles to seaward of Malaita. In the event, this would probably have resulted in detection of the Japanese carrier force on 5 May. If the search had been conducted from Espiritu Santo Island, its radius would have reached the tip of Choiseul Island.¹⁵⁰

The divided theater command hampered significantly the ability to obtain comprehensive and timely information on the whereabouts and movements of the enemy forces both prior to and during the operation. MacArthur had sole responsibility for land-based aircraft operating over the Coral Sea. By decision of the Joint Chiefs of Staff, Nimitz was not allowed to intrude; the consequence was that a large part of the Coral Sea was not searched.¹⁵¹ Another problem was that Allied land-based aircraft crews were poorly trained for maritime reconnaissance. The long flying times because of the remoteness of bases and operating areas caused fatigue. Also, the number of land-based search aircraft was limited. For these reasons, during the operation CTF 17, Rear Admiral Fletcher, would be forced to supplement them with carrier-based planes.¹⁵²

ALLIED PLANS AND PREPARATIONS

Despite public statements that he was committed to the defense of Australia by holding New Guinea, MacArthur deployed only one brigade of militia to Port Moresby and sent no reinforcements until 14 May, when the battle of the Coral Sea was over, although he had four experienced Australian Imperial Force brigades and the U.S. 41st Division. The SWPA had to rely almost exclusively on land-based aircraft and naval forces to defend Port Moresby.¹⁵³

SWPA's Allied Air Forces elements under Lieutenant General George Brett (who had taken the post on 20 April 1942) consisted of six AAF air groups—three pursuit and one light bombardment, medium bombardment, and heavy bombardment each—and four RAAF squadrons. This force was impressive, but only on paper. There were about a hundred medium bombers and forty-eight heavy bombers, but fewer than half were operational.¹⁵⁴ Some units had escaped from the Philippines; the others were inexperienced. The entire force had great logistical difficulties. Squadrons were sometimes able to put no more than a single plane in the air. Out of about five hundred aircraft in the inventories, only about two hundred, or 40 percent of the entire force, could support the Coral Sea operation.¹⁵⁵

SWPA's Allied Naval Forces, under Vice Admiral Leary, were small and inadequate for defending Port Moresby from an enemy landing. Most of SWPA's surface forces were actually controlled by Fletcher. The submarine force consisted of eleven old S-class boats. Only four to six submarines could be sent on patrol at any given time; they were usually employed around Rabaul and off the eastern New Guinea coast.¹⁵⁶ The Australians were unable to hold their position in the

Solomons, because of the lack of air cover; they had at Tulagi only about fifty men and a seaplane base with four Catalinas, which patrolled out to New Britain and Bougainville. The Australians decided on 2 May to evacuate Tulagi after receiving warning from the coastwatchers that an enemy force was on the way from Rabaul.¹⁵⁷

In early April, Nimitz had only one carrier task force at sea—TF 17, with *Yorktown*, under Fletcher—in the eastern part of the Coral Sea. TF 11, with *Lexington*, had steamed into Pearl Harbor on 26 March. On 3 April, Rear Admiral Aubrey Fitch relieved Vice Admiral Brown as CTF 11. Nimitz directed Fitch to sail on 15 April and exercise near Palmyra. Four days later he informed Fletcher that he had taken over command of the SOPAC. Nimitz directed Fletcher to sail east to Tongatabu for replenishment. TF 17 would depart Tongatabu on 27 April back to the Coral Sea.

After the 10 March attack on shipping in the Huon Gulf, there were no significant actions by Allied carriers in the South Pacific. However, MacArthur wanted them to remain in the area. On 17 April, he expressed concern that carriers were leaving the Coral Sea for Tongatabu. He wrote to Nimitz, “[I] consider it necessary that one task force [be] maintained in that area at all times to check further enemy advance.” Nimitz was surprised at the message but assured MacArthur that TF 17 was being withdrawn only to replenish and deal with problems with its fighter aircraft. He strongly agreed on the desirability of maintaining a force in the Coral Sea and would try to do so. Nimitz privately told King, “It is my conviction that enemy advance should be opposed by [a] force containing not less than two carriers.” He again recommended to King that TF 11 be sent to the Coral Sea to join TF 17 for upkeep.¹⁵⁸

In January 1942 King and his staff planned a diversionary raid (later popularly known as the “Doolittle Raid”) on Japan to raise U.S. morale after the string of Allied defeats in the Pacific. From decoded enemy radio messages, the American planners knew that the Japanese carriers were still far to the south, but this diversionary raid tied up half of Nimitz’s carrier strength.

Halsey’s TF 16 (*Enterprise*, plus *Hornet*, attached for the Tokyo raid), was expected to return to Pearl Harbor on 25 April. It could sail to the South Pacific by the end of April and join Fletcher’s TF 17 on about 14 May. The only concern was whether *Hornet* would have its full complement of aircraft. TF 16 would operate with TF 17 and then relieve it when Fletcher left the South Pacific about 15 May, because *Yorktown* needed dry-docking and overhaul. *Lexington* could stay until 1 June, when it would go to Hawaii for dry-docking as well. The number of the Catalinas at Nouméa would be increased from six to twelve. SWPA would provide land-based air support. A group of cruisers and a half-dozen submarines

would be deployed from Hawaii to the South Pacific and five more to observe Truk.¹⁵⁹

Plans to counter the pending Japanese offensive against Port Moresby were prepared independently by the SWPA and POA staffs. On 4 April, an Australian study stressed that the key to the defense of Australia was Port Moresby.¹⁶⁰ After the Japanese occupation of Rabaul and points on the New Guinea coast MacArthur decided to strengthen Allied positions in New Guinea and develop Port Moresby as a major air and land base. Though, as noted, he sent no troops to Port Moresby, he directed expansion of air facilities in northeastern Australia, specifically at Townsville and Cloncurry, for its defense; this program was in its early stages in late April 1942. MacArthur also made extensive preparations to thwart the Japanese attempt to seize Port Moresby. Among other things, he directed SWPA's Allied Air Forces to intensify reconnaissance and concentrate striking forces at Townsville and Cloncurry airfields. He planned to conduct repeated air attacks against Rabaul in early May; long-range heavy bombers would also attack Lae, Deboyne Island, and convoys in adjacent areas. The garrison commanders in northeastern Australia and at Port Moresby were alerted to the possibility of the enemy landings. SWPA's Allied Naval Forces also sent three Australian cruisers, known as TF 44, under Rear Admiral John G. Crace (Royal Navy) to join with TF 17 in the Coral Sea.¹⁶¹

For its part, Nimitz's staff produced on 22 April a detailed estimate of the situation. Nimitz assumed that a Japanese offensive in the New Guinea–New Britain–Solomons area would begin about 3 May. For Nimitz the problem was how to stop the pending Japanese advance in the southwestern Pacific and yet ensure the security of Hawaii and the lines of communications with the West Coast. He delegated authority to conduct operations directly to Fletcher. When TF 16 arrived, Halsey would be in overall command.¹⁶²

The U.S. carrier groups in the Coral Sea did not have enough fleet oilers. The 21,077-ton and 16.5-knot *Neosho* carried 18,000 tons of oil, and the 16,800-ton and 10-knot *Tippecanoe*, 11,130 tons. There were also two oilers available in Australia but they were not equipped for underway replenishment. Carriers and their escorts consumed very large quantities of fuel, especially at high speed in combat. Fortunately, carriers and cruisers could carry sufficient amounts of fuel to give them long range and endurance. For example, *Yorktown* carried 7,500 tons of fuel, enough for seventeen days at twenty knots. But the 1,900-ton U.S. destroyers of 1942 carried only about five hundred tons of fuel, giving them an endurance at fifteen knots of about 4,700 miles, or thirteen days. At thirty-four knots—in combat action or when screening fast carriers—their endurance was only thirty-two hours, about 1,100 miles.¹⁶³ Carriers and cruisers often refueled

the short-legged destroyers and more quickly than oilers could, but the entire task group had to be withdrawn from the operating area.

This shortage of fleet oilers, which was true of the Pacific theater as a whole, was a major Allied weakness and vulnerability. Fletcher tried always to keep an oiler with his carrier group except during the strike operations. He was also greatly concerned that the Japanese not discover that he had only two fleet oilers. If the Japanese attacked them, U.S. carrier operations in the Coral Sea would be greatly restricted.¹⁶⁴

Compared to the Japanese plans, the Allied plan was simple and straightforward. The single and the most important objective was to prevent the enemy invasion forces from reaching and landing troops at Port Moresby. The prerequisite was to deny local control of the Coral Sea to the enemy. This objective could be accomplished by the destruction or neutralization of the enemy's greatest, and critical, strength, his carrier force—in modern terms, his operational center of gravity. Based on Nimitz's Operation Order 23-42 of 29 April 1942, Fletcher stated in his Operation Order 2-42 the mission of TF 17 was to destroy enemy ships, shipping, and aircraft at favorable opportunities in order to assist in checking further advances by the enemy in the New Guinea–Solomons area.¹⁶⁵ He also wrote, "This force will operate about seven hundred miles south of Rabaul. Upon receiving intelligence of enemy surface forces advancing to the southward, this force will move into a favorable position for intercepting and destroying the enemy."¹⁶⁶

An annex to the operation order contained information on the Japanese air strikes against Horn Island, Port Moresby, and Tulagi. It estimated the enemy's land-based air strength at 102 aircraft (forty-two fighters, thirty-six bombers), twenty flying boats, and four floatplanes). The enemy searches would, it assessed, extend up to six hundred miles from Rabaul and the Shortland Islands. Fletcher anticipated that the enemy offensive would start around 28 April.

Fletcher's operation order's estimate of the enemy's carrier forces was largely accurate. The frontline carriers *Zuikaku* and *Shōkaku* would have sixty-three aircraft each (twenty-one fighters, twenty-one dive-bombers, and twenty-one torpedo bombers). "*Ryūkaku*" was falsely estimated to carry eighty-four aircraft (twenty-one fighters, forty-two dive-bombers, and twenty-one torpedo bombers); the air complement of the actual *Shōhō* was much smaller. In addition, it was believed that the (17,400 ton) converted carrier *Kasuga Maru* would be present, carrying some forty-five aircraft. These forces were supported, the order stated, by two heavy cruisers, three light cruisers, sixteen destroyers, two converted seaplane tenders, one submarine tender, six submarines, eight gunboats, and nineteen transports and auxiliary vessels.¹⁶⁷

EXECUTION

The Port Moresby–Solomons operation was executed between 27 April, when the first Japanese force element was deployed, and 11 May, when the Japanese decided to abandon pursuit of TF 17. Combat took place between 3 and 8 May, and the decision was reached in a carrier engagement on 8 May (see map 3). In the process both sides made numerous errors in identifying opposing forces. Many wrong decisions were made, either because the commander received incorrect information on the whereabouts and movements of enemy forces or because he lacked that information entirely or exercised poor judgment.

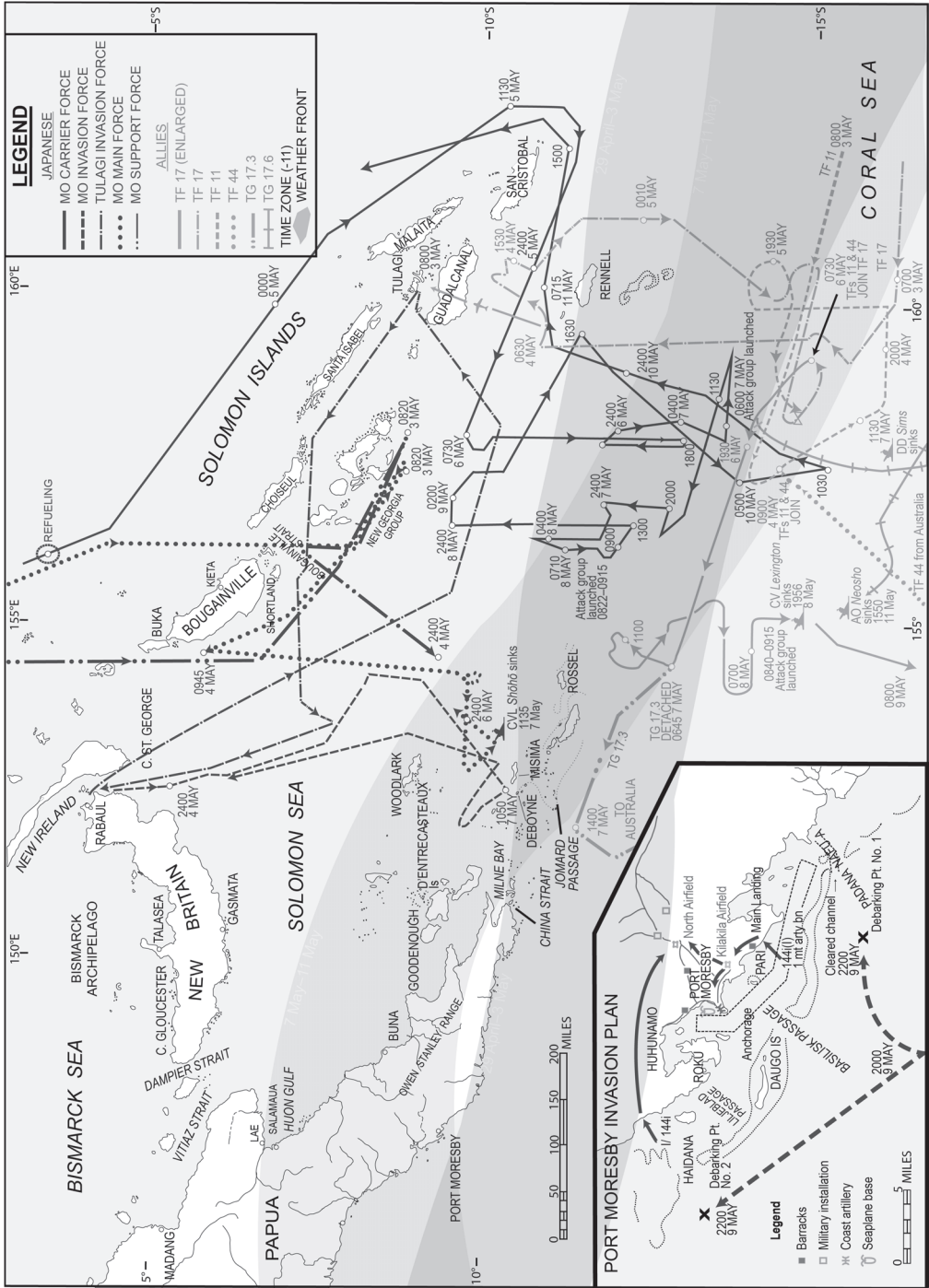
The major combat involved in the operation can be arbitrarily divided into three phases. Phase I was the deployment of combat forces and the Japanese landing on Tulagi (27 April–3 May), II the Allied attack on Tulagi and preliminaries (4–7 May), and III the carrier engagement and withdrawal of forces (8–11 May).

Phase I (27 April–3 May)

The Japanese forces deployed for the Port Moresby–Solomons operation in nine force elements, each proceeding toward its assigned area independently. On 29 April four submarines of SubRon 8 (*I-22*, *I-24*, *I-28*, and *I-29*) left Rabaul and headed to their assigned patrol area some 285 miles southwest of Guadalcanal; another submarine (*I-21*) took up a station off Nouméa; in early May, two boats of SubGru 21 (*RO-33* and *RO-34*) sailed out of Rabaul for the waters south of Osprey Reef, some 205 miles north-northeast of Cairns, Australia; they were then to proceed to the approaches off Port Moresby.¹⁶⁸ On 29 April, the MO Support Force sailed from Truk southward to pass west of Buka Island and then turn south and eastward toward a position west of Tulagi. The next day the MO Main Force sortied from Truk, steaming southward toward the passage between Bougainville and Choiseul and then eastward toward a position some 150 miles west of Tulagi. The Tulagi Invasion Force, with about four hundred troops of the 3rd Kure Special Naval Landing Force, sortied from Rabaul on 29–30 April. The MO Carrier Force sailed from Truk on 1 May to pass eastward of San Cristobal and enter the Coral Sea. Finally, on 4 May, the MO Invasion Force, with five thousand troops of the South Seas Force and five hundred of the 3rd Kure Special Naval Landing Force, sailed from Rabaul and proceeded southward toward Jomard Passage.

On the Allied side, TF 17 spent seven days at Tongatabu for provisioning and upkeep. It sailed out of Tongatabu on 27 April and three days later reentered the Coral Sea. In the meantime TF 11 left Pearl Harbor for the South Pacific. At 0615 on 1 May TF 17 and TF 11 met some three hundred miles southwest of the New Hebrides. TF 17 and TF 11 were vulnerable there to surprise enemy attack, because, as noted, Allied land-based patrol aircraft did not cover the central and

MAP 3



eastern parts of the Coral Sea and there was no coverage of a potential approach by the enemy carrier forces eastward of the Solomon Islands.¹⁶⁹ Fletcher sent TF 11 to join the oiler *Tippecanoe*, with the cruiser *Chicago* and destroyer *Perkins*, at latitude 16° 00' south, longitude 161° 45' east; take as much fuel as possible from *Tippecanoe* before the oiler returned to Efate as directed by Nimitz; and then rejoin TF 17 the next morning. Fletcher wanted to have as much fuel as possible on *Neosho* as a reserve.¹⁷⁰

Allied cryptanalysts continued to provide valuable information to Nimitz, Fletcher, and Fitch. For example, on 29 April, COM 14 decoded several messages sent by the Fourth Fleet clearly indicating that the MO operation was under way. Fourth Fleet's Operation Order 13 was read in its entirety. It stated that the objective of the MO operation was, first, "to restrict the enemy's movements and [this] will be accomplished by means of attacks on outlying units and various areas along the north coast of Australia. The Imperial Navy will operate to its utmost until this is accomplished. Further we will continue to operate against all bases used by enemy aircraft."¹⁷¹

The MO Carrier Force had been tasked to ferry eighteen Zero fighter aircraft from Truk to Rabaul, flying them in on 2 May. However, unforeseen events caused this simple task to disrupt the timetable for the entire operation.¹⁷² Everything went according to plan until 2 May, when the MO Carrier Force reached a position about 240 miles northeast of Rabaul. That day and the next, Takagi tried to launch Zeros; both attempts failed because of bad weather, which also prevented the carriers from refueling. Takagi then decided to refuel on the 4th and make a third attempt (which was apparently successful) before resuming his southerly advance. The loss of two days derailed the meticulous synchronization of the plan.¹⁷³ As it turned out, the MO Carrier Force could not be within range to protect Tulagi until 5 May, too late to have any real impact on the situation.¹⁷⁴

In the morning of 2 May, TF 17 completed refueling from *Neosho*, but Fletcher was disappointed to receive a message from Fitch that TF 11 would not complete refueling until noon on 4 May. Fletcher also learned, from MacArthur's dispatches, that the enemy was making final preparations for the advance on Port Moresby. Because his own force was too far away, he directed Fitch to fuel his destroyers on a northwesterly course at night and rejoin TF 17 at daylight, 4 May, at latitude 15° 00' south, longitude 157° 00' east. Task Force 44 was also to join TF 17 at that point (see sidebar, "Allied Task Organization").¹⁷⁵

At about 0800 on 3 May, the Japanese forces landed at Tulagi. The MO Support Force set up a direct screen, while the MO Main Force provided distant cover to the Tulagi Invasion Force. By dawn on 3 May, the MO Main Force was about 180 miles west of Tulagi. The aircraft from *Shōhō* supported the invasion. However, Gotō was unable to stay in the area very long, because he had to support

the MO Invasion Force.¹⁷⁶ Hence, his force moved at about 1100 on 3 May on a northwesterly course toward Queen Caroline Harbor, Buka Island, for refueling. The MO Support Force was then located about sixty miles west of the MO Main Force and was on the way to join the MO Invasion Force, then preparing to sail out of Rabaul. The MO Carrier Force was about 210 miles northeast of New Ireland and about 630 miles northwest of Tulagi, and sailing on a southeasterly course.¹⁷⁷

At about 0800 on 3 May TF 17 was at 16° 43' south, 159° 24' east (or about five hundred miles south from Tulagi), on a northwesterly course, while TF 11 was at 16° 26' south, 161° 50' east, on a westerly heading. The distance between these two forces was about a hundred miles. Fletcher for some reason did not think it necessary to combine TF 17 and TF 11 into a single force. This is somewhat surprising, because Nimitz had directed him to combine them, at Point BUTTERCUP, some 320 miles south of San Cristobal Island. Fletcher had received information that the enemy would probably start his operation by 28 April, and he knew about the presence of CarDiv 5 at Truk. He should have also assumed that the enemy's highest priority would be to cover his landing forces with his air and surface forces. With TF 11 and TF 17 as a single force, Fletcher could have delivered a much more powerful attack against the Japanese forces that landed in Tulagi. TF 11 had completed refueling early and was ready for action, but that was apparently unknown to Fletcher. The two forces were beyond visual distance, and it was not desirable to break radio silence.¹⁷⁸

At 1900 on 3 May, Fletcher received a message from MacArthur, who informed him about the presence of five or six enemy ships at 1700 (five in the afternoon) on 2 May off the southern tip of Santa Isabel Island, possibly moving toward Tulagi. MacArthur also stated that two enemy transports had sighted barges unloading at Tulagi, at an "unspecified time." Fletcher now regretted that the entire force was not combined and able to deliver a powerful strike at daylight the next day.¹⁷⁹

Phase II (4–7 May)

This phase of the operation began with the Allied carrier attack on Tulagi on 4 May. Afterward, and for the next three days, the opposing carrier forces tried to locate each other. They misidentified ships they sighted, and that led to strikes against unintended targets. However, by the end of 7 May each side knew the location of the other and was prepared for the decisive carrier engagement the next day.

The MO Invasion Force, escorted by one light cruiser and six destroyers, left Rabaul on 4 May and sailed southward. It planned to transit the Jomard Passage around midnight on 6–7 May and sail around the tip of Papua New Guinea

toward Port Moresby.¹⁸⁰ After withdrawal of both the MO Main Force and the MO Support Force, the Tulagi Invasion Force was left without any cover. Yet this seemed to the Japanese not to pose any immediate danger, because they expected no enemy reaction to their landing at Tulagi. In any case, CarDiv 5 was supposed to be about 120 miles north of Tulagi and from there would be able to cover it. Unfortunately, for the Japanese, Takagi's force, having been delayed ferrying Zeros to Rabaul, was actually 340 miles north of Tulagi.¹⁸¹

By 0700 on 4 May, TF 17 arrived at position 11° 10' south, 158° 49' east, or about 150 miles southwest of Tulagi. At about 0630, *Yorktown* launched the first of three strikes against the enemy ships at Tulagi and positions ashore. The first-wave attack took place between 0815 and 0830. By about 0900, TF 11 and TF 44 were joined at a position of about 250 miles south of TF 17.¹⁸² *Yorktown*'s second-wave attack was conducted between 1210 and 1410, and the third between 1500 and 1515.¹⁸³ Some sixty aircraft in all took part in these strikes. Despite a large number of bombs and torpedoes dropped, the results were disappointing. Only a single enemy destroyer, one auxiliary, and two special-duty minesweepers were sunk; four other ships were damaged.¹⁸⁴ The remaining enemy transports, minelayers, and one destroyer immediately left Tulagi harbor.¹⁸⁵ The Japanese lost five seaplanes, while the Allies lost three aircraft and eight others were damaged.¹⁸⁶ Despite damage inflicted, the Japanese continued to build their seaplane base, which became operational on 6 May and conducted its first reconnaissance flights.

After receiving a report on the enemy's attack on Tulagi, Takagi stopped the refueling and directed his force to sail southeast and search for the enemy carriers in the Solomons area. These searches were unsuccessful. The Japanese were greatly surprised by the attack on Tulagi. Until then, as noted, they had firmly believed that the enemy would be forced to react to their moves; they now learned that the situation was the other way around.¹⁸⁷

On 5 May Nimitz informed Fletcher and Fitch about reliable information as of 3 May that the "Orange [i.e., Japanese] Moresby Striking Force composed of CruDiv 5 and CarDiv 5 will launch attacks on the Allied bases Port Moresby areas on X-Ray minus 3 or minus 2 days. These attacks will be launched from the southeast. X-Ray day is not known but one indication points to 10 May. Above attacks to be carried out until successful completion by Orange."¹⁸⁸ The Allied commanders also learned that the MO Carrier Force would be joined by the Tulagi Invasion Force at 1400 (2 PM) on 6 May. The combined formation would leave the Coral Sea at about 1800 on 7 May and steam south of Emerald Reef, Milne Bay.¹⁸⁹ After receiving this message, Fletcher decided to start refueling, move toward the Louisiades the next day, and fight a carrier engagement on the

7th.¹⁹⁰ Both Fletcher's carrier groups sailed on a westerly course; Crace's TF 44 was about fifty miles ahead.

The ships of TF 17 sailing on southwesterly courses were refueled by *Neosho* on 5 and 6 May. At 0735 on 6 May, Fletcher put his Operation Order 2-42 in effect.¹⁹¹ His task organization combined Task Forces 17, 11, and 44 into an enlarged TF 17, which now consisted of two large carriers, seven heavy cruisers, one light cruiser, thirteen destroyers, two fleet tankers, and a seaplane tender. Tactically, it was divided into five groups (see sidebar, "Allied Task Organization").¹⁹² Task Group (TG) 17.2 had a dual mission of operating against the Japanese force advancing southward and protecting the carriers against air and submarine attacks. The main task of TG 17.3 was to defend the carriers. These two groups were so organized that they could, depending on the situation, carry out each other's missions. Fletcher believed that four destroyers screening each carrier provided sufficient protection.¹⁹³ Because he was senior to Fletcher and the more experienced aviator, Fitch became officer in tactical control of all air operations. The enlarged TF 17 would operate generally in the Coral Sea about seven hundred miles south of Rabaul, outside the range of Japanese land-based aircraft.¹⁹⁴

In the early morning of 6 May Takagi's carrier force was about 120 miles southwest of the western tip of Guadalcanal. At that point a flying boat from Tulagi detected the U.S. task force and accurately reported its position. Headquarters in Rabaul received the report and relayed it to Takagi. Allied cryptanalysts picked up the signal;¹⁹⁵ Takagi, however, would not receive this information until 7 May.¹⁹⁶ Meanwhile, on the 6th, Takagi started refueling his ships in preparation for a carrier engagement the next day.¹⁹⁷

At about 1030 four B-17s from Cloncurry and staged through Port Moresby unsuccessfully attacked *Shōhō* some sixty miles south of Bougainville. About 1300, Allied search aircraft detected the MO Invasion Force sailing southward toward Jomard Passage.¹⁹⁸

In the meantime, at about 1000, a reconnaissance flying boat from Tulagi detected TF 17. Takagi received that report about 1050; his force was now about three hundred miles north of TF 17, still refueling. He sent both carriers, with two destroyers, southward at twenty knots to reduce the distance to the enemy carrier force. However, according to Japanese reports, Takagi decided that the chance to attack had been lost and turned north at 1800 to await another opportunity the following day.¹⁹⁹ At that point the presence of Takagi's force some seventy miles north of TF 17 was unknown to Fletcher. The Japanese carriers were shielded by the overcast of a cold front and search aircraft had failed to detect them. Takagi, for his part, failed to carry out long-range searches on either 5 or 6 May.²⁰⁰

Continued on page 132

ALLIED TASK ORGANIZATION

POA FORCES

(Adm. Chester W. Nimitz, CINCPac, Pearl Harbor)

Task Force 17

(Rear Adm. Frank Jack Fletcher, *Yorktown*)

TG 17.2 (Attack Group, Rear Adm. Thomas C. Kinkaid)

TU 17.2.1 (2 CAs—*Minneapolis*, *New Orleans*)

TU 17.2.2 (3 CAs—*Astoria*, *Chester*, *CA-33 Portland*)

TU 17.2.4 (5 DDs—*Phelps*, *Dewey*, *Farragut*, *Aylwyn*, *Monaghan*)

TG 17.3 (Support Group, Rear Adm. John G. Crace)

17.3.1 (2 CAs—HMAS *Australia*, *Chicago*; 1 CL—HMAS *Hobart*)

17.3.4 (2 DDs—*Perkins*, *Walke*)

TG 17.5 (Air Group, Rear Adm. Aubrey W. Fitch)

TU 17.5.1 (2 CVs—*Yorktown*, *Lexington*)

(*Yorktown*—17 F4F Wildcat fighters, 18 SBD-2 Dauntless dive-bombers, 13 TBD-1 Devastator torpedo bombers)

(*Lexington*—21 F4F Wildcat fighters, 18 SBD-2 Dauntless dive-bombers; 17 SBD-2 Dauntless dive-bombers [scouts], 12 TBD-1 Devastator torpedo bombers)

TU 17.5.4 (4 DDs—*Morris*, *Anderson*, *Hamman*, *Russell*)

TG 17.6 (Fueling Group)

2 AOs (*Neosho*, *Tippecanoe*)

2 DDs (*Sims*, *Worden*)

TG 17.9 (Search Group)

1 AV (*Tangier*)

VP-71 (6 PB-5s)

VP-72 (6 PB-5s)

SWPA FORCES

(Gen. Douglas MacArthur, Brisbane)

Allied Naval Forces

(Vice Adm. Herbert F. Leary)

TF 42 Eastern Australia Submarine Group

(Rear Adm. Francis W. Rockwell)

Task Group 42.1 (Capt. Ralph Waldo Christie)

1 AS (*Griffin*, at Brisbane)

SubDiv 53 (*S-44*, *S-45*, *S-46*, *S-47*)

SubDiv 201 (*S-37*, *S-38*, *S-39*, *S-40*, *S-41*)

TF 44

(Rear Adm. John G. Crace, RN; temporarily assigned to TF 17)

1 CA (HMAS *Australia*)

1 CL (HMAS *Hobart*)

Allied Air Forces

(Lt. Gen. George H. Brett, Melbourne)

3rd Bombardment Group (light) (Charters Towers) 52 bombers (19 B-25s; 19 A-24s; 14 A-20s)

8th Light Bombardment Squadron

13th Light Bombardment Squadron

90th Light Bombardment Squadron

22nd Bombardment Group (medium) (Townsville Area) 92 bombers (12 B-25s, 80 B-26s)

90th Light Bombardment Squadron

13th Light Bombardment Squadron

19th Bombardment Group (heavy) (Cloncurry) 48 B-17s

30th Bombardment Squadron

40th Reconnaissance Squadron

93rd Bombardment Squadron

435th Bombardment Squadron

8th Pursuit Group (Townsville Area; Port Moresby) 100 fighters (50 P-39s each)

35th Fighter Squadron

36th Fighter Squadron

35th Pursuit Group (Sydney) 100 fighters (P-39s/P-38s)

49th Pursuit Group (Darwin) 90 fighters (P-40s)

7th Fighter Squadron

8th Fighter Squadron

9th Fighter Squadron

Photographic Squadron; 4 aircraft Flight A, 8th Bombardment Squadron

ROYAL AUSTRALIAN AIR FORCE

No. 11/20 Squadrons (Gavutu-Tanambogo, Tulagi) 4 PBV-5 Catalinas

(withdrawn on 2 May 1942)

No. 24 Squadron (Townsville) 3 Wirraways (trainers used as fighters)

No. 32 Squadron (Port Moresby) Hudson bombers

No. 75 Squadron (Port Moresby) 3 P-40s

TULAGI

2/1 Independent Company, Australian Imperial Force (24 commandos)

(withdrawn on 2 May 1942)

PORT MORESBY

Garrison

(Maj. Gen. B. M. Morris, some 5,000 troops)

39th Infantry Bn.

49th Infantry Bn.

53rd Infantry Bn.

13th Field Regt.

23rd Heavy AA Battery

Detachment, 1st Independent Co.

30th Infantry Bde. Signal Section

30th Infantry Bde. HQ Defense Platoon

Fixed Defenses

Moresby Fixed Defenses Fortress Engineers

Moresby Fixed Defenses AA Artillery (six 3-inch guns)

1st Army Troops Co.

7th Field Co.

New Guinea Volunteer Rifles

Papuan Infantry Bn.

8th Military District Section Intelligence Corps

15th Supply Personnel Co.

Base Hospital

Sources: Bates et al., *Battle of the Coral Sea*, app. 2, table 1; Coulthard-Clark, "RAN and RAAF Involvement in the Battle of the Coral Sea," p. 66.

On 6 May *Kamikawa Maru* of the MO Support Force was detached at Deboyne Island to establish a seaplane base there; that base became operational the next day. Afterward, the MO Support Force withdrew to the vicinity of the D'Entrecasteaux Islands to protect the right flank of the MO Invasion Force.²⁰¹ By midnight on 6–7 May, the MO Invasion Force was northward of Misima Island; the MO Main Force, with *Shōhō*, was some ninety miles northeast of Deboyne Island.²⁰²

At 0625 on 7 May, TF 17 was about 115 nautical miles south of Rossel Island. Fletcher wrote in his postaction report that he planned for the morning air

search on the 7th to locate the most suitable objective for attack and obtain positive or negative information regarding enemy carriers, on which he had obtained no information since the previous afternoon. However, searches to the east and northeastward were not completed, due to bad weather.²⁰³

During the night of 6 May, Fletcher received reports from SWPA land-based aircraft of the enemy transports and light cruisers heading toward Jomard Passage. For this reason he directed, at 0645 on 7 May, Crace's TG 17.3 plus the destroyer *Farragut* to proceed northward and block the Jomard Passage.²⁰⁴ As TG 17.3 approached, a Japanese seaplane detected it, mistakenly reporting "one battleship, two heavy cruisers and three destroyers." At about 1430, TG 17.3 was attacked by twelve torpedo bombers and nineteen land-attack aircraft from Rabaul. All these attacks were skillfully avoided by the Allied ships.²⁰⁵ Crace's force was also mistakenly attacked by three high-level B-17 heavy bombers, but all their bombs fortunately missed their intended targets.²⁰⁶

At 1526, Crace reported to Fletcher that he was unable to complete his mission without air cover and would withdraw to a position some 220 miles southeast of Port Moresby. From there TG 17.3 would be able to intercept any enemy force exiting the Louisiades and advancing toward Port Moresby. TG 17.3's ships were low on fuel. Crace also did not have information on the location of TF 17 or know Fletcher's intentions. Nonetheless, because of TG 17.3's presence Inoue ordered the invasion convoy to loiter north of the Jomard Passage and await the outcome of the pending carrier battle.²⁰⁷

Fletcher had been well aware that Crace would be operating without air cover, but he intended that the enemy convoy not slip through the Jomard Passage and reach Port Moresby. Fletcher later explained that he sent Crace north to ensure that the invasion was thwarted even if the enemy carriers finished off TF 17 in the expected duel.²⁰⁸ Fletcher would also claim, in an interview after the war, that he "feared the opposing carriers would quickly neutralize each other," recalling the examples of "many prewar tactical exercises." In his view, Crace's group would be able to prevent the enemy invasion force from exiting the Jomard Passage whether the Allied carriers intervened or not.²⁰⁹

Nonetheless, Fletcher made a wrong decision in detaching TG 17.3. It was too risky to employ a surface force without air cover in an area known to be within effective range of enemy land-based aircraft. It was pure luck (notwithstanding the skill of his ships) that Crace's force was not seriously damaged or destroyed; Fletcher had no way of knowing what would happen. Also, by detaching Crace's force Fletcher seriously weakened the AA and antisubmarine warfare (ASW) defense of his carriers, which would in today's terms be called the "friendly operational center of gravity." With the detachment of an additional destroyer during the night of 7–8 May, TF 17 was left with twelve instead of nineteen escorts for

the decisive engagement that occurred on the 8th.²¹⁰ Had TF 17's carriers been destroyed, the enemy would have had no difficulty destroying TG 17.3 as well.

In the morning on the 7th, Takagi still did not know the whereabouts of the enemy naval force. He made a decision, based on Admiral Hara's recommendation, to search the area southward to make sure that no enemy carrier force was in his rear as he moved westward to provide cover for the MO Invasion Force.²¹¹ Both the Japanese land-based and carrier search aircraft misidentified enemy ships on several occasions that morning. For example, at 0522, a Japanese land-based aircraft reported the presence of one enemy carrier about 460 miles southwest of Tulagi. At 0640, a seaplane reported "one battleship, one cruiser, seven destroyers, and what looks like one aircraft carrier" about ninety-five miles south of Rossel Island.²¹² At 0722, an aircraft from *Shōkaku* reported enemy ships about 160 miles away; this was actually TG 17.6, the Fueling Group, *Neosho* and the destroyer *Sims*, misidentified as one cruiser and three destroyers. At 0800, without waiting to confirm the accuracy of the report, Hara launched seventy-eight aircraft (eighteen fighters, thirty-six dive-bombers, and twenty-four torpedo bombers). At 0915, they sighted *Neosho* and *Sims* and attacked, twelve torpedo bombers with fighters in the first wave, followed by twenty-six heavy bombers.²¹³ At 1051, *Shōkaku*'s pilots realized the mistake in identification, but it was too late. *Neosho* was hit by seven bombs and, heavily damaged, later sank; *Sims* was hit by three bombs and sank immediately.

Fletcher believed that the enemy carrier force was somewhere north of his force near the Louisiades. Actually, Takagi's force was about three hundred miles east of TF 17. At 0619 he directed *Yorktown* to launch ten dive-bombers as scouts. About 0815, *Yorktown* search aircraft reported "two carriers and four heavy cruisers" a short distance northeast of Misima Island, or some 175 miles northwest of the Allied carriers. Fletcher immediately decided to launch an all-out attack against these ships. By 1000 ninety-three aircraft (fifty-three dive-bombers, twenty-two torpedo bombers, and eighteen fighters) were airborne. At that time, his carriers were in the weather front, hidden by overcast, while Gotō's force, which he had just detected, was in broad sunlight. However, after the Allied aircraft were airborne it was discovered that this report had been improperly decoded: the pilot had actually observed only two enemy heavy cruisers and two destroyers, in addition to the reported carrier.²¹⁴ The attack groups from both *Yorktown* and *Lexington* were directed to attack what proved to be *Shōhō*.²¹⁵

At 1055 *Shōhō*, defended by only about eight fighters and surrounded by cruisers, was attacked by the Allied aircraft from both carriers.²¹⁶ *Shōhō* was hit with seventeen bombs and five torpedoes. It sank at 1135. Fifteen out of its twenty-one aircraft went down with it; 638 men were killed and seventy-three wounded—Japanese destroyers rescued about a hundred men. The Allies lost

only three aircraft.²¹⁷ Despite the success in sinking *Shōhō*, the Allied aircraft should have also attacked other ships in Goto's force and thereby inflicted much higher losses, but they did not. Instead they returned to their carriers about 1340; within an hour all were rearmed and ready for action. But Fletcher was still in the dark as to the whereabouts of the enemy carrier force. Even if it had been sighted that afternoon, it would have been too late to launch a successful day attack. He decided to turn southwest and mount a strike the next day.

Shortly after 1500 Takagi received an erroneous report from a seaplane based on Deboyne that the enemy carrier force (actually TG 17.3) had changed course to the southeast. Hence, at 1515, Hara sent eight bombers to confirm the report by searching two-hundred-nautical-mile sectors to the west of the Japanese carriers. However, before hearing from them, Hara hastily made an unsound decision to launch an attack on the supposed enemy carrier group; at 1615 he sent twelve dive-bombers and fifteen torpedo bombers with his most experienced pilots and crews to search westward out to 280 miles. In the meantime the first group of aircraft returned without having found the enemy ships. At 1747, *Yorktown*'s radar detected the second group; at that time the Japanese carriers were some two hundred miles east of TF 17. *Yorktown*'s eleven fighters were vectored to intercept the incoming Japanese aircraft. In the ensuing dogfights, nine enemy aircraft were shot down and one was damaged, while the Allies lost three. The Japanese pilots now became disoriented and lost their way; at about 1900 (7 PM), six tried to land on *Yorktown*, mistaking it for their own carrier until they encountered AA fire and turned away. In addition, eleven aircraft were lost trying to make night landings on the Japanese carriers.²¹⁸ By 2000 (8 PM) on 7 May, when the last Japanese aircraft landed, the opposing carrier forces were only about a hundred nautical miles apart.

Phase III (8–11 May)

The two opposing carrier forces did not detect each other until the morning of 8 May. At about 0615, the Japanese carrier force was about 140 miles east of Rossel Island. Hara launched seven torpedo bombers to search from southeast to southwest out to 250 miles; several aircraft from Rabaul and Tulagi assisted. CarDiv 5's screen was reinforced by two heavy cruisers from Goto's force. The MO Invasion Force was directed to steam to a position forty miles east of Woodlark Island and await the outcome of the coming battle.

At 0635, Fitch launched eighteen bombers to search in all directions out to about two hundred nautical miles. The Allied carriers were under mostly clear skies; visibility was about seventeen miles. In contrast, the enemy carriers were now under a warm frontal zone, with low-hanging clouds and heavy overcast; visibility varied from two to fifteen miles. Nonetheless, *Lexington*'s aircraft

sighted the enemy carriers at about 0820, and a few minutes later the Japanese aircraft spotted the American ones. The opposing carriers were then about 210 nautical miles from each other. The two sides were almost even in strength; the Allied carriers had 126 aircraft (118 were operational), while the Japanese had 121. The Japanese carriers had a screen of four heavy cruisers and six destroyers, while the American carriers had five heavy cruisers and seven destroyers.

Between 0822 and 0915, the Japanese carriers launched a combined strike group of sixty-nine aircraft (eighteen fighters, thirty-three dive-bombers, and eighteen torpedo bombers). In contrast, the Allied carriers launched their strikes separately. From 0840 through 0915, *Yorktown* sent forty-one aircraft, and all but four reached their targets. *Lexington* launched within the same time frame forty-three aircraft.²¹⁹ *Yorktown*'s dive-bombers arrived first over the Japanese carriers but had to wait for the torpedo bombers. *Shōkaku* and the *Zuikaku* were about ten thousand yards apart, hidden under a rainsquall. They were protected by about sixteen fighters. *Yorktown*'s aircraft did not find *Zuikaku* and focused all their attention on *Shōkaku*, attacking at 1100. The torpedo bombers failed to achieve any hits.²²⁰ *Yorktown*'s dive-bombers obtained only two bomb hits;²²¹ however, one of them rendered *Shōkaku* unable to launch aircraft. *Lexington*'s aircraft arrived over their targets at 1130; two dive-bombers attacked *Shōkaku* and scored one hit; two other dive-bombers attacked *Zuikaku* but missed. About half of fifty-two aircraft from *Lexington* did not find the enemy carriers.²²²

In the meantime, at 1044, the Japanese aircraft attacked the Allied carriers. *Lexington*'s radar detected the enemy aircraft at a range of about seventy miles, and nine fighters were sent to intercept. However, six of them flew too low and missed the enemy aircraft. The Allied carriers were about three thousand yards apart. At 1113 the Japanese started their attack, giving most of their attention to *Lexington*. *Yorktown* received one bomb hit, but *Lexington* was struck by two torpedoes and two bombs.²²³ *Lexington* was heavily damaged and unsalvageable; it was sunk by a destroyer that evening to prevent it from falling into enemy hands.²²⁴ After the end of the engagement, the Allied carriers were left with at least forty-nine operational aircraft, while the Japanese had only thirty-nine available to fight the next day.²²⁵

Takagi mistakenly believed that both enemy carriers were sinking and so decided in the early afternoon that he could send the damaged *Shōkaku* back to Truk.²²⁶ He was not entirely wrong in doing so. As Takagi and Hara informed Inoue, they were unable to launch a second strike that afternoon, or probably the next day either, for reasons of low aircraft strength, pilot fatigue, and low fuel in the screening ships. Because of the repeated interruptions between 4 and 8 May,

the MO Carrier Force had never fully refueled; some destroyers had only 20 percent of their fuel capacity remaining, the rest of them 40 percent.²²⁷

In late afternoon on 8 May, Inoue and his staff made a detailed estimate of the situation. Only *Zuikaku* was left undamaged, and it had only half its aircraft. In his view, the enemy had lost one carrier and probably another. The question for Inoue was whether the MO Invasion Force could proceed to Port Moresby. He believed that a single weakened carrier air group was incapable of protecting it from the enemy land-based aircraft in Australia. Also, Japanese forces needed to regroup. Inoue decided to delay the attack on Port Moresby until 3 July. Hence, he directed the MO Invasion Force to return to Rabaul. Inoue also decided to hold Tulagi but to abandon the seaplane base at Deboyne as untenable for the time being.²²⁸

Inoue's decision greatly angered Yamamoto, who was convinced that the Japanese had sunk two enemy carriers and won the battle. Yamamoto did not know that the Japanese carriers had few aircraft remaining and hence saw no reason why the operation should not continue. However, he could do nothing about the postponement of the landing at Port Moresby, but he did not want the enemy naval forces to escape; he ordered Inoue to resume his pursuit and "annihilate the remaining enemy force." At about 2300 on 8 May, Inoue directed Takagi and Gotō to resume their pursuit. At 0200 the next day, *Zuikaku* and its escorts changed the course to the southeast and then southwest. About one hour later Goto's force was joined by *Zuikaku*'s group. Shortly afterward, Inoue changed his mind again and directed both groups to reverse course and head northward. On 11 May, Takagi received the orders to leave the area entirely.²²⁹ The Port Moresby–Solomons operation was over.

AFTERMATH AND ASSESSMENT

After the loss of *Lexington*, TF 17 sailed southward to regroup. On the morning of 9 May a scout plane from *Yorktown* sighted the enemy carrier force 175 miles to the northwest. Fletcher prepared his force for possible enemy attack and launched a strike. He also asked for help from SWPA air forces. Brett responded by sending fourteen bombers, which reached the targets at the same time as the *Yorktown* group. However, the target proved to be a reef. That afternoon Nimitz directed Fletcher to return to Pearl Harbor or the West Coast with both carriers (Nimitz had not yet been informed of the loss of *Lexington*) and the screening ships of the original TF 17 (i.e., before its enlargement). Kinkaid's TG 17.2 would join TF 16. The same day, Fletcher detached Crace's force and brought TF 44 back into existence. Afterward, TF 44 proceeded to Brisbane for refueling.²³⁰ On 10 May, Fletcher informed Nimitz that he planned to stop at Tongatabu on the way to Pearl Harbor.²³¹

The Allies now learned from reading enemy messages that the Port Moresby operation had been postponed, that the Port Moresby occupation force would return to Rabaul, and that CruDiv 5 and CarDiv 5 would refuel in the Bougainville area and then cover the occupation of Ocean and Nauru islands. CruDiv 6, with two heavy cruisers of the *Aoba* class, plus gunboats and destroyers, would support the Nauru–Ocean Island invasion.²³² Fletcher did not respond to these movements. At 1600 on 11 May, he detached Kinkaid to Nouméa, while one heavy cruiser was to rejoin TF 17 at Tongatabu.²³³

TF 16, with *Enterprise* and *Hornet*, sailed out of Pearl Harbor on 30 April for the Coral Sea but did not reach the scene of action in time. Instead, TF 16 made a feint toward Nauru and Ocean Island. On 15 May, Inoue received a report from the search aircraft about the presence of the enemy carriers some 450 miles east of Tulagi. Shortly afterward, he directed the Nauru–Ocean Island Invasion Force to return to Truk (these two islands were eventually captured by the Japanese on 25–26 August 1942).²³⁴ On 16 May, TF 16 reversed its course toward Pearl Harbor and arrived there ten days later.

The battle of the Coral Sea was the first in which surface ships did not see each other and so did not have the opportunity to use their guns or torpedoes. All losses on both sides were caused by air strikes. The Japanese sank a fleet oiler and a destroyer and so heavily damaged a large carrier that it had to be sunk. The Japanese lost only one small carrier and a few small ships at Tulagi. They also lost sixty-nine aircraft (twelve fighters, twenty-seven dive-bombers, and thirty torpedo bombers) and 1,074 men; the Allies lost sixty-six aircraft and 543 men.²³⁵ One Japanese large carrier was heavily damaged, and the losses of aircraft and experienced pilots were hard to replace; CarDiv 5 did not rejoin the fleet for more than two months.²³⁶ Nonetheless, the Japanese achieved a clear tactical victory. Operational victory belonged to the Allies, because the Japanese attempt to capture Port Moresby by sea was stopped and the entire operation delayed. Further, the damage inflicted on *Shōkaku* and losses to *Zuikaku*'s air wing prevented both carriers from taking part in the Midway–Aleutians operation the next month. Had they been available then, the chances of Allied victory would have been much lower. After Midway, the Japanese decided to seize Port Moresby by land, across the Owen Stanley Range; that attempt ultimately failed.

CONCLUSION AND OPERATIONAL LESSONS LEARNED

The Japanese strategic decision in January 1942 to expand Japan's defensive perimeter in the aftermath of its initial great successes in the Pacific War was due to what has been called "victory disease." The Japanese were surprised by their quick victories and low losses. The leaders of the IJN were far more aggressive than those of the army in wishing to exploit early successes by

preventing the enemy from gaining time and mounting a counteroffensive. Yamamoto was keenly aware that decisive victory against the U.S. Pacific Fleet was the key to consolidating Japanese strategic success before the industrial power of the United States became overwhelming. In trying to expand Japan's defensive lines in the Pacific and the Indian Ocean, however, naval and army leaders clearly did not match their strategic ends and means. Differences between the Naval General Staff and the Combined Fleet on whether the main thrust in the Second Operational Stage of the war should be in the South, Central, or North Pacific resulted in a bad compromise plan. The subsequent changes in timing of the Port Moresby–Solomons and Midway–Aleutians operations, coupled with Yamamoto's inability to assign adequate forces to either major operation, were perhaps the main reason that both ultimately failed. A major problem for the Japanese was the lack of centralized planning at the strategic level. The Army and the Naval General Staffs had to negotiate their differences in planning any major army-navy operation. In the IJN's case, the situation was even more complicated because the Combined Fleet led by Yamamoto exercised often much greater influence in operational planning than the Naval General Staff did. *In sequencing major operations in two widely separated parts of a theater, strategic leadership should make sure that adequate forces are available or becoming available for the accomplishment of each operational objective. Also, sufficient time should be given for redeployment, upkeep, and rest of forces taking part in the successive major operation. Otherwise, the risk of ultimate failure in one or both major operations will be considerably increased. Planning of major operations and campaigns should be vested in a single operational commander; competing planning responsibilities result in a compromise plan and often lead to the failure of the operation.*

In early 1942, the U.S. problem was how to check further Japanese advances in the southern and southwestern Pacific. Admiral King was the most vocal proponent of the view that the Allies should strengthen their defenses in the South Pacific and prevent any additional gains by the Japanese; otherwise, it would take much more time and sacrifice to roll back the Japanese conquests. The Allied strategy of fighting Germany first was fundamentally sound. However, General Marshall and other Army leaders were too rigid in pursuing their Germany-first strategy. They fought back King's efforts to deploy more troops, better equipped and trained, to the South Pacific. King's strategy was vindicated by the eventual Allied success in protecting the links between Australia and New Zealand and the United States. *In determining the main and secondary theaters of war, the strategic leadership should not go to extremes and assign almost all the best trained and equipped forces to the main theater; the principle of economy of effort requires that*

numerically sufficient and highly capable forces be assigned to the theater of secondary effort as well.

The weather played a prominent role in the both the Japanese and Allied carrier operations and greatly influenced the outcome of the engagement on the 8th. If the Allied carriers had been protected by low-hanging clouds and poor visibility as their Japanese counterparts were the Japanese aircraft might have not been successful; the opposite was equally true. *Planning and preparation for a major naval operation or campaign require thorough study of all aspects of the operating area. Despite all technological advances, the weather and climate considerably affect the employment of one's naval forces and aircraft. Operational commanders and planners should properly evaluate their potential impact on all phases of a major operation or campaign.*

The Port Moresby–Solomons operation was conducted over a major part of the Coral Sea and the adjacent Louisiade and the Solomons archipelagos, as well as the southeastern part of New Guinea, and the Bismarck Archipelago. Allied forces deployed from bases in New Caledonia, the New Hebrides, and eastern Australia. This part of the southwestern Pacific was militarily “undeveloped,” lacking naval and air bases and support facilities adequate for surface combatants, submarines, or aircraft. The Japanese controlled a number of well developed naval bases and airfields in the Bismarcks, in the Carolines, and on the southeastern coast of New Guinea. The Bismarcks and Solomons provided many natural harbors and anchorages that could serve as advance bases or havens for surface ships and as seaplane bases. The Allies were less fortunate, in that there were very few good bases and airfields in the South Pacific; those in eastern Australia were too far away. A major problem for both the Japanese and the Allies was the lack of any repair facilities for aircraft carriers. *Forces taking part in a major operation or campaign will have great difficulties in accomplishing their objectives without a well developed theater-wide infrastructure. Hence, whenever possible adequate numbers of naval bases and airfields and their supporting structures should be developed already in peacetime.*

Relatedly, Japanese naval forces and aircraft occupied central positions and so operated along relatively short, interior, and divergent lines. Their bases of operations flanked the sea routes from the U.S. West Coast and the Panama Canal to Australia and New Zealand. The Allied base of operations in the South Pacific was unfavorable for the employment of naval forces and aircraft. During the operation, the Allied carrier forces occupied a central position. In contrast, the Allied land-based aircraft deployed in eastern Australia and New Caledonia occupied an exterior position and operated along very long and converging lines of operation. *Naval warfare is invariably aimed to obtain/maintain or dispute control of certain ocean/seas. It cannot be conducted without access to bases/ports*

and airfields in the littorals. Positions and their locations still have considerable influence on the successful employment of one's naval forces. However, control of positions means little unless it is combined with the factor of force. The operational commanders and planners should not overestimate the importance and value of either central or exterior positions and resulting lines of operation or communications. They should try everything to maximize advantages and minimize disadvantages of a certain position for the employment of their combat forces. Yet what counts most is not the geography of the situation but the combat readiness, morale, and the skills of the operational commanders in employing their forces in combat.

Both the Japanese and the Allies had undeveloped command structures in the theater. The Japanese structure was highly fragmented. The parochialism of the two services, a major problem for the Japanese throughout the war in the Pacific, was particularly evident at the general-staff level. However, in the planning and execution of the Port Moresby–Solomons operation, the Japanese ensured unity of effort through unity of command. Admiral Inoue, as the Fourth Fleet commander, was responsible for command and control of all the navy and army forces. Yet he depended on the Combined Fleet for additional forces and had no influence on Yamamoto's decision to change the operation's timetable. *Operational commanders should have sufficient organic forces to ensure that assigned objectives can be accomplished; otherwise, it is difficult to exercise mission command. Optimally, they should also have full command and control over all subordinate forces during planning and the execution of a major operation or campaign.*

In contrast to the Japanese, the Allies established at least the rudiments of a theater or operational command organization. The Southwest Pacific Area and the Pacific Ocean Areas were, in modern terms, “theater-strategic commands.” Most combat actions were conducted within SWPA, under MacArthur. Nimitz, as CINCPAC/CINCPac, had exclusive authority over the employment of Task Forces 17 and 11. As a result, a divided theater command existed both prior to and during the battle of the Coral Sea. This created numerous problems in providing comprehensive searches by land-based aircraft and intelligence sharing. Giving operational control over TFs 17 and 11 to MacArthur was effectively impossible; neither Nimitz nor King would allow the employment of carrier forces by an Army general; the carriers were the only major striking force left in the Pacific Fleet and could not be put at risk. Another problem was the lack of an intermediate commander for the South Pacific. Nimitz was nominally in command of SOPAC. However, he was some four thousand miles from the scene of action, and was unable to form an accurate and timely picture of the situation in the South Pacific. *Optimally, in planning and execution of a major operation or campaign, all subordinate forces should be*

controlled by a single commander. His headquarters should not be too far from the scene of action. This ensures the most effective control over operational intelligence, fires, logistics, and protection. The boundaries between the adjacent theaters should not be so rigid as to prevent friendly forces from crossing them as needed.

During the preliminaries, Nimitz employed carrier forces to great effect in reacting to Japanese advances in the Bismarcks and on the eastern coast of New Guinea. The Allied carrier raids in the southwest Pacific had much greater effect on Japanese planning for the pending Port Moresby–Solomons operation than was realized at the time. The carrier raid on Tokyo on 18 April 1942 had a great psychological effect, on the Japanese strategic leadership and people, and it also reinforced Yamamoto’s decision to go ahead with his planned Midway operation. However, the raid deprived the Allies of two large carriers to oppose the enemy advance into the South Pacific, although Admiral King had reliable information, from decoded enemy messages, about the planned attack on Port Moresby. Had the Tokyo raid not taken place, Nimitz would have had four carriers to oppose the Japanese thrust toward Port Moresby and probably would have inflicted much greater enemy losses. *The highest strategic leadership should give to subordinate theater commanders full command authority over all forces deployed within their areas of responsibility. Normally, the major striking forces should be employed in the theater of main effort. Hence, these forces should not be employed in a secondary theater, thereby making it difficult or even impossible to reinforce the theater of main effort as quickly as necessary. This is especially true if intelligence obtains timely and reliable knowledge of the enemy’s plans and intentions. Also, the time between two consecutive operations conducted in two separate maritime theaters of operations should allow for redeployment from one theater to another. This, in turn, requires sound balancing of the operational factors of space, time, and force versus an operational/strategic objective.*

The Japanese had inadequate knowledge of the situation in the theater. They knew nothing of the enemy’s plans or intentions, because of their inability to break Allied codes and the lack of human intelligence. Most of their information was obtained by scout aircraft and seaplanes based in the Bismarcks–New Guinea–Solomons. Their information on the physical features of the objective area and on ground defenses and air strength in the southwest Pacific was accurate, but Japanese knowledge of enemy carriers—their numbers, whereabouts, and movements—was a different matter. Apparently, the Japanese commanders and their staffs had too much faith in the reports of their pilots and submariners.

The Japanese seem to have based their decisions and plans on what they assessed as the enemy’s intentions and gave insufficient weight to the enemy’s capabilities. *Generally, and unless the commander possesses reliable and accurate*

knowledge of the enemy's plans, it is unwise to prepare estimates and make decisions based on enemy intentions instead of his capabilities. The enemy can use deception to hide his true intentions and actions.

Japanese planning for the Port Moresby–Solomons operation was deeply flawed. First, the plan was based on overly optimistic assumptions. The absence of accurate and reliable information on the whereabouts of the Allied carriers did not lead Inoue and his staff to assume the possibility of large enemy forces in the Coral Sea—to the contrary. The Japanese had a penchant for assigning multiple objectives to be accomplished simultaneously or nearly so; in this instance, the Japanese tried to accomplish all their objectives in a single major combat phase; they put too much emphasis on speed of action. They also added such minor tasks as ferrying Zeros to Rabaul, without taking into account the extra time they might take. *Operational commanders should not draft plans based on either overly optimistic or pessimistic assumptions. The lack of information on the whereabouts and the movements of the main enemy forces should counsel a great deal of caution in drafting operational plans. The factor of speed is critical for the successful employment of one's forces. However, a balance should be found between the need for speedy execution of the operation and avoidance of simultaneous or nearly simultaneous pursuit of multiple objectives. The mission given to a subordinate commander should not be changed by adding secondary tasks; the latter usually take more time than originally envisaged.*

The Japanese relied on the factor of surprise (and presumed enemy passivity), but here they did not prepare an operational deception plan to enhance the chances of achieving it. Instead, they unrealistically believed that secrecy alone would suffice. *Surprise, judiciously conceived and successfully employed, can be a most potent factor but should not be counted on. A plan for a major operation or campaign should include provision for operational deception to enhance the chance of surprising the enemy, but there must be means to ensure success even if surprise is not obtained. Secrecy alone is rarely sufficient to achieve surprise.*

The Japanese plan for the Port Moresby–Solomons operation was also overly complex. Its success depended heavily on precise synchronization of movements and actions of a large number of force elements—which made Inoue reluctant to change the plan until it was too late to have any effect. No provision was made for unforeseen events, such as the sudden appearance of the enemy and his reactions, mistakes made by the Japanese commanders, or bad weather. Finally, the Japanese task organization was too fragmented. The result was a considerable reduction in the combat potential of the force as a whole. The Japanese plans could work well only if everything went according to the plan and the enemy reacted as prescribed in the plans. *Too many intermediate objectives slow one's operational tempo and require commitment of larger forces and more time for*

the accomplishment of the ultimate objective. They also result in overly complicated plans. Task organizations should be simple, straightforward, and logical. The principle of unity of effort through unity of command should be applied. Division of a force into several smaller elements should generally be avoided.

The single greatest advantage the Allies had over the Japanese was accurate, reliable, and timely knowledge of enemy plans and intentions. The Allied commanders knew of the high-level Japanese debate about the Second Operational Stage of the war months and weeks before resulting plans were executed. King and Nimitz had great faith in the work of their cryptanalysts and so used this tremendous advantage to the fullest; otherwise, they would not have been able to employ their forces so successfully. By reading and properly analyzing enemy radio messages they were able to concentrate and prepare TF 17 and TF 11 in the Coral Sea in time to oppose the advance toward Port Moresby.

MacArthur and his staff, in contrast, apparently had little confidence in COMINT and instead depended on the relatively unreliable reports of land-based search aircraft based in northeastern Australia and at Port Moresby. Their information had only tactical value, limited by inadequate numbers of aircraft, long flying distances, and poor training of their crews for searches over seas and oceans. For their part, searches by TF 17 aircraft were limited by divided theater command. The absence of searches from the Solomons was one of the main reasons that the MO Carrier Force was not detected prior to entering the Coral Sea. Fletcher, who was never advised by SWPA of the gaps in the coverage by its aircraft, never had a full operational picture of the situation after the enemy forces were initially detected. *In planning a major operation or campaign, commanders and their staffs should focus on creating an operational picture of all aspects of the situation in a given theater of operations. Hence the need to convert information obtained from strategic and tactical intelligence into operational intelligence; otherwise, a critically important operational perspective on the situation will be missing. Operational commanders should not arbitrarily decide which sources of intelligence are more important; all sources of intelligence should be used in obtaining the picture of the operational situation and its trends.*

The Allied plans and preparations to counter the enemy thrust into Papua New Guinea started in late March 1942, when the first reliable information was obtained about the Japanese intentions in the southern and southwestern Pacific. The single major problem was how to concentrate sufficiently potent carrier force in the Coral Sea. The raid on Tokyo prevented Nimitz from concentrating four large carriers against two Japanese carriers. The U.S. Navy had only seven large carriers, and not all of them were available for action in the South Pacific. Another major problem was the shortage of oilers capable of underway replenishment. There was also an acute shortage of destroyers to be used as screen for the carrier

forces and for providing escort for the transports. Both Nimitz's Operation Order 23-42 and Fletcher's Operation Order 2-42 were classically simple and executable plans. Nonetheless, in contrast to the Japanese plan, they had the Allied carriers operating separately, not as a single group. This greatly weakened their strike packages in combat with the enemy carrier force. *Plans should be comprehensive but simple and logical. They should be also flexible enough to accommodate unforeseen events, due to either natural causes or the actions of commanders. The success of a major operation at sea is heavily dependent on the logistical support and sustainment. Operational commanders, not logisticians, are directly responsible for synchronizing the operations and logistics.*

The Japanese execution of the Port Moresby–Solomons operation matched the meticulousness but also the rigidity with which it had been planned. From the landing at Tulagi on 3 May until the end of the operation on 11 May, the opposing carrier forces made largely unsuccessful efforts to find each other, and mistaken identifications led to many minor and several major unsound decisions. Hara's decision to launch a late-afternoon strike against what he believed to be an enemy carrier force was a reckless gamble that cost a number of hard-to-replace experienced pilots. Similarly, Fletcher's decision to detach Crace's TG 17.3 could have ended in the destruction of Crace's unprotected group or greater losses for the carrier force because of the resulting weakening of its ship-based AA/ASW defense. Neither Hara's nor Fletcher's decision can be justified based on the information each had or did not have at the time.

Further, and although directed by Nimitz, Fletcher ran undue risks by waiting until 6 May to put his operation order into effect and finally combining TF 17 and TF 11 into an enlarged TF 17. Finally, Inoue was too slow in changing or modifying the plan in the face of unforeseen events, usually only after it was obvious that the original plan could not be carried out. He did not display "operational vision"—the ability to assess a situation properly, anticipate the flow of events accurately, and then react quickly and decisively when something unforeseen happens.

In the course of the execution of a major operation or campaign, operational commanders should keep a running estimate of the situation and make quick decisions. Their focus on the ultimate objective should be unwavering, but they should be willing to modify or even abandon intermediate ones. Sequencing and synchronization of movements should be flexible; otherwise, the plan is most likely to fail. Reports from commanders directly involved in carrying out a task should never be exclusively relied on; if they cannot be cross-checked against other sources of information they should be treated as assumptions. As Helmuth von Moltke the Elder observed and has been often repeated since, no plan survives the first contact with the enemy. The enemy has a will of his own and will react in ways that rarely can be

foreseen and might even appear irrational. Though operational commanders and their staffs should try to obtain the best knowledge and understanding possible of all aspects of the situation in a theater, there will be always gaps, in which they must make reasoned assumptions. High-stakes risks must sometimes be taken, but they should be calculated—an operational commander must find a proper balance between overcautiousness and recklessness. Finally, friction can be minimized but never mastered: chance, mistakes, and pure luck are inherent to warfare. The knowledge, judgment, and skills of commanders and their subordinates therefore remain, as they have in the past, the keys to success in war.

NOTES

1. *Japanese Army Operations in the South Pacific Area*, trans. Steven Bullard (Canberra: Australian War Memorial, 2007), p. 1.
2. Louis Morton, *Strategy and Command: The First Two Years*, U.S. Army in World War II: The War in the Pacific (Washington, D.C.: U.S. Army Center for Military History, 1962; updated 1989), p. 201.
3. Toshikaze Ohmae, "The Battle of Savo Island," in *The Japanese Navy in World War II: In the Words of Former Japanese Naval Officers*, ed. David C. Evans, 2nd ed. (Annapolis, Md.: Naval Institute Press, 1986), pp. 213–14.
4. Cited in Gary Brown and David Anderson, *Invasion 1942? Australia and the Japanese Threat*, Background Paper 6 (Canberra: Parliamentary Research Service, 29 April 1992), p. 5.
5. John B. Lundstrom, *The First South Pacific Campaign: Pacific Fleet Strategy December 1941–June 1942* (Annapolis, Md.: Naval Institute Press, 1976), p. 40.
6. Henry P. Frei, "Japan's Southward Advance and Its Threat to Australia in the Final Stage," cited in Mark Jacobsen, "US Grand Strategy and the Defence of Australia," in *The Battle of the Coral Sea 1942: Conference Proceedings, 7–10 May 1992* (Sydney: Australian National Maritime Museum, 1993), p. 48. Throughout, Japanese names are given in Western fashion, surnames last.
7. *Ibid.*, pp. 48–49.
8. Paul S. Dull, *A Battle History of the Imperial Japanese Navy (1941–1945)* (Annapolis, Md.: Naval Institute Press, 1978), p. 116.
9. Lundstrom, *First South Pacific Campaign*, p. 42.
10. *Ibid.*
11. Frei, "Japan's Southward Advance and Its Threat to Australia in the Final Stage," cited in Jacobsen, "US Grand Strategy and the Defence of Australia," p. 49.
12. *Ibid.*, p. 48.
13. Lundstrom, *First South Pacific Campaign*, p. 43.
14. Brown and Anderson, *Invasion 1942?*, p. 8.
15. "Battle of the Coral Sea: Overview and Preparations for Battle," *The Pacific War*, pp. 5–6, www.pacificwar.org.au/.
16. Brown and Anderson, *Invasion 1942?*, p. 9.
17. Lundstrom, *First South Pacific Campaign*, pp. 44–45.
18. *Ibid.*, p. 45.
19. Brown and Anderson, *Invasion 1942?*, annex reprinting "Battle of the Coral Sea," *Navy* (April–June 1992), p. 4.
20. Lundstrom, *First South Pacific Campaign*, p. 46.
21. Ohmae, "Battle of Savo Island," pp. 213–14; Frei, "Japan's Southward Advance and Its Threat to Australia in the Final Stage," cited in Jacobsen, "US Grand Strategy and the Defence of Australia," p. 49.

22. "The US Navy Refuses to Adopt a Defensive Posture in the Pacific," *The Pacific War*, p. 2, www.pacificwar.org.au/.
23. "Admiral C. W. Nimitz, USN Orders Task Force Two under Rear Admiral H. F. Leary, USN, to Proceed to the Australia New Zealand Area and Become Part of the 'Anzac' Force Operating Directly under the Commander in Chief, United States Fleet," p. 1, folder CINCPAC Operation Order 11-42, 31 January 1942, box 20, Records Relating to Naval Activities in World War II: Plans, Orders & Related Documents, CINCPAC January 1942 to April 1942, Record Group [hereafter RG] 38, Records of the Office of Naval Operations, National Archives and Records Administration, College Park, Md. [hereafter NARA].
24. Ibid.
25. Jacobsen, "US Grand Strategy and the Defence of Australia," p. 23.
26. "US Navy Refuses to Adopt a Defensive Posture in the Pacific," p. 3.
27. Lundstrom, *First South Pacific Campaign*, p. 92.
28. Ibid., p. 50.
29. Jacobsen, "US Grand Strategy and the Defence of Australia," p. 23.
30. Ibid., p. 49.
31. "US Navy Refuses to Adopt a Defensive Posture in the Pacific," p. 4.
32. Lundstrom, *First South Pacific Campaign*, p. 55.
33. Richard Bates et al., *The Battle of the Coral Sea: May 1 to May 11 Inclusive, 1942—Strategical and Tactical Analysis* (Newport, R.I.: Naval War College, 1947), pp. 3–4.
34. Ibid., p. 4.
35. *Japanese Army Operations in the South Pacific Area*, p. 12.
36. Bates et al., *Battle of the Coral Sea*, p. 20.
37. Ibid., p. 12.
38. *Japanese Army Operations in the South Pacific Area*, p. 42.
39. Morton, *Strategy and Command*, p. 199.
40. "Battle of the Coral Sea," p. 4.
41. *Reports of General MacArthur: The Campaigns of MacArthur in the Pacific* (Washington, D.C.: U.S. Government Printing Office, 1966), vol. 1, p. 46.
42. Cited in Morton, *Strategy and Command*, p. 199.
43. Ministry of Defence (Navy), *War with Japan*, vol. 2, *Defensive Phase* (London: Her Majesty's Stationery Office, 1995), p. 136.
44. Bates et al., *Battle of the Coral Sea*, p. 22.
45. Ibid., p. 3.
46. *Reports of General MacArthur*, p. 97.
47. John B. Lundstrom, *Black Shoe Carrier Admiral: Frank Jack Fletcher at Coral Sea, Midway, and Guadalcanal* (Annapolis, Md.: Naval Institute Press, 2006), p. 100.
48. Bates et al., *Battle of the Coral Sea*, p. 22.
49. It was reestablished on 20 October 1937 and became subordinate to the China Area Fleet. On 15 November 1939, the Fourth Fleet became a part of the China Expeditionary Fleet; it became subordinate to the Combined Fleet on 15 November 1940.
50. Bates et al., *Battle of the Coral Sea*, pp. 4–5. The South Seas Fleet is sometimes erroneously referred to as the "South Seas Force."
51. Ibid., p. 5.
52. *Japanese Army Operations in the South Pacific Area*, p. 52.
53. Ibid., pp. 47–48.
54. Bates et al., *Battle of the Coral Sea*, p. 18.
55. G. Hermon Gill, *Royal Australian Navy 1942–1945* (Canberra: Australian War Memorial, 1968), p. 32.
56. Bates et al., *Battle of the Coral Sea*, pp. 18–19.
57. Ibid., p. 19.
58. Headquarters U.S. Army, Japan, *18th Army Operations*, Japanese Monograph 37 (Washington, D.C.: Chief of Military History, U.S. Army Dept., n.d.), vol. 1, cited in Donald S. Detwiler, *War in Asia and the Pacific 1937–1949*, vol. 7, *The Southern Area, Part II* (New York: Garland, 1980) [hereafter Japanese Monograph 37], p. 3.
59. *Japanese Army Operations in the South Pacific Area*, p. 33. Some sources say the execution date was to have been 3 March.

60. Japanese Monograph 37, p. 3.
61. Morton, *Strategy and Command*, p. 215.
62. Frederick D. Parker, *A Priceless Advantage: U.S. Navy Communications Intelligence and the Battles of Coral Sea, Midway, and the Aleutians* (Fort Meade, Md.: Center for Cryptologic History, National Security Agency, 1993), p. 5, available at www.centuryinter.net/.
63. Morton, *Strategy and Command*, p. 215.
64. *Japanese Army Operations in the South Pacific Area*, p. 34; Japanese Monograph 37, p. 3.
65. Morton, *Strategy and Command*, p. 215; Japanese Monograph 37, p. 3.
66. *Japanese Army Operations in the South Pacific Area*, p. 45.
67. Parker, *Priceless Advantage*, p. 6.
68. *Japanese Army Operations in the South Pacific Area*, p. 41; Japanese Monograph 37, p. 4.
69. Lundstrom, *First South Pacific Campaign*, p. 398.
70. Morton, *Strategy and Command*, pp. 214–15.
71. Lundstrom, *First South Pacific Campaign*, p. 398.
72. *Japanese Army Operations in the South Pacific Area*, pp. 43, 54–55.
73. *Ibid.*, p. 48.
74. *Ibid.*
75. *Ibid.*, p. 55.
76. Bates et al., *Battle of the Coral Sea*, pp. 5–6.
77. *Japanese Army Operations in the South Pacific Area*, p. 61.
78. Samuel E. Morison, *History of United States Naval Operations in World War II*, vol. 4, *Coral Sea, Midway and Submarine Actions, May 1942–August 1942* (Boston: Little, Brown, 1984), pp. 10–11.
79. *Japanese Army Operations in the South Pacific Area*, p. 61.
80. Parker, *Priceless Advantage*, p. 7.
81. Morton, *Strategy and Command*, p. 216.
82. *Japanese Army Operations in the South Pacific Area*, p. 50.
83. *Ibid.*, p. 52. *Nachi*, also in CruDiv 5, was not assigned.
84. Lundstrom, *First South Pacific Campaign*, pp. 46–47.
85. *Japanese Army Operations in the South Pacific Area*, p. 51.
86. Lundstrom, *First South Pacific Campaign*, p. 47.
87. Lundstrom, *Black Shoe Carrier Admiral*, p. 122.
88. *Japanese Army Operations in the South Pacific Area*, p. 52.
89. *Ibid.*, p. 50.
90. *Ibid.*, p. 51.
91. *Ibid.*, p. 58.
92. *Ibid.*, p. 51.
93. *Ibid.*, p. 59.
94. *Ibid.*, p. 55.
95. *Ibid.*, p. 49.
96. *Ibid.*
97. *Ibid.*, pp. 49, 59.
98. Gill, *Royal Australian Navy 1942–1945*, pp. 40–41.
99. *Japanese Army Operations in the South Pacific Area*, p. 49.
100. *Ibid.*, p. 50.
101. Lundstrom, *First South Pacific Campaign*, pp. 72–73.
102. *Ibid.*, pp. 56, 59.
103. Morton, *Strategy and Command*, p. 217.
104. Bates et al., *Battle of the Coral Sea*, p. 15.
105. Lundstrom, *First South Pacific Campaign*, p. 73.
106. Ministry of Defence (Navy), *War with Japan*, p. 135.
107. Dull, *Battle History of the Imperial Japanese Navy*, p. 118.
108. H. P. Willmott, *The Barrier and the Javelin: Japanese and Allied Pacific Strategies February to June 1942* (Annapolis, Md.: Naval Institute Press, 1983), p. 209.
109. Morison, *Coral Sea, Midway and Submarine Actions*, p. 12.
110. *Japanese Army Operations in the South Pacific Area*, pp. 55–56.

111. Patrick H. Donovan, *Oil Logistics in the Pacific War: In and after Pearl Harbor* (Maxwell Air Force Base, Ala.: Air Command and Staff College, Air Univ., April 2001), p. 40.
112. Hiromi Tanaka, "A Japanese View: Coral Sea to Midway," in *Battle of the Coral Sea 1942*, p. 79.
113. Ibid., p. 78.
114. Bates et al., *Battle of the Coral Sea*, p. 5.
115. Morison, *Coral Sea, Midway and Submarine Actions*, pp. 10–12.
116. Bates et al., *Battle of the Coral Sea*, pp. 13–14.
117. Cited in Tanaka, "Japanese View," p. 79.
118. Bates et al., *Battle of the Coral Sea*, p. 15.
119. Ibid., p. 13.
120. *Japanese Army Operations in the South Pacific Area*, p. 57.
121. Bates et al., *Battle of the Coral Sea*, p. 14.
122. *Reports of General MacArthur*, p. 47.
123. Samuel E. Morison, *The Two-Ocean War: A Short History of the United States Navy in the Second World War* (Boston: Little, Brown, 1963), p. 142.
124. *Japanese Army Operations in the South Pacific Area*, p. 58.
125. Military History Section, Headquarters Army Forces Far East, *Submarine Operations in Second Phase Operations*, part 1, *April–August 1942*, Japanese Monograph 110 (Washington, D.C.: Office of the Chief of Military History, U.S. Army Dept., 1952) [hereafter Japanese Monograph 110], pp. 6–7.
126. Gill, *Royal Australian Navy 1942–1945*, p. 40.
127. Bates et al., *Battle of the Coral Sea*, p. 15.
128. *Japanese Army Operations in the South Pacific Area*, p. 57; Japanese Monograph 110, p. 10.
129. *Japanese Army Operations in the South Pacific Area*, p. 58.
130. Henry F. Schorreck, "Battle of Midway: 4–7 June 1942: The Role of COMINT in the Battle of Midway (SRH-230)," *The Navy Department Library*, p. 4, www.history.navy.mil/. BELCONNEN was the former CAST (COM 16) at the Navy Yard in Manila, transferred to Corregidor on 5 February 1942 and from there to Melbourne on 11 March 1942. It was initially subordinate to the ANZAC Area command and later to COMSWPA.
131. Lundstrom, *Black Shoe Carrier Admiral*, p. 119.
132. Ibid.
133. Parker, *Priceless Advantage*, p. 17.
134. Ibid., p. 7.
135. Ibid., p. 16.
136. *The Role of Communications Intelligence in the American-Japanese War*, vol. 1, *August 1941–June 1942, September 1, 1942*, Studies in Cryptology, 1917–1977, p. 211, SRH 012, box 01, RG 457, Records of the National Security Agency/Central Security Service, NARA.
137. Ibid., pp. 211–12.
138. Rear Adm. Edwin T. Layton Papers, Series II, pp. 26–27, Unpublished Items, SRH 012, 036, 043, 081, and 125, Ms. Ac. 86.10, box 15, Naval Historical Collection, Naval War College, Newport, R.I. [hereafter Layton Papers].
139. Lundstrom, *Black Shoe Carrier Admiral*, p. 120.
140. Cited in ibid., p. 122. American cryptanalysts apparently missed the fact that *Kaga* was not part of the force in the Indian Ocean. However, their British counterparts at Colombo quickly learned that two carriers were to operate in the southwestern Pacific. They decoded almost an entire message sent to Inoue on 13 April advising that CarDiv 5 (*Shōkaku*, *Zuikaku*), after detaching from the Striking Force near Singapore, would proceed to Truk on 28 April. The Admiralty passed this information to King, who in turn warned Nimitz and Leary on 15 April.
141. Gill, *Royal Australian Navy 1942–1945*, p. 41.
142. Parker, *Priceless Advantage*, p. 22.
143. CINCPAC Enemy Activities File April–May 1942, s.v. 25 April, Studies in Cryptology, 1917–1977, SRH 272, box 93, RG 457, NARA.
144. "Summary of Japanese Naval Activities on File in the White House Map Room, April 14, 1942" [hereafter "Summary of Japanese Naval Activities"], 26 April Supplement, United States Navy Records Relating to Cryptology, 1918–1950, SRNS 013, folder 001-0352, box 1, RG 457, NARA.
145. JICPOA-CINCPAC Intelligence Bulletins 16 March–1 June 1942, s.v. 27 April, folder

- 3222/23, box 107, RG 38, Records of the Office of the Chief of Naval Operations, NARA.
146. "Summary of Japanese Naval Activities," 28 April.
 147. Bates et al., *Battle of the Coral Sea*, pp. 24–25.
 148. Chris Coulthard-Clark, "RAN and RAAF Involvement in the Battle of the Coral Sea," in *Battle of the Coral Sea 1942*, p. 66.
 149. Bates et al., *Battle of the Coral Sea*, p. 20.
 150. Ibid., pp. 25–26.
 151. Dull, *Battle History of the Imperial Japanese Navy*, p. 122.
 152. Bates et al., *Battle of the Coral Sea*, pp. 26–27, 122.
 153. Lundstrom, *First South Pacific Campaign*, pp. 92–95.
 154. Ibid., p. 95.
 155. Bates et al., *Battle of the Coral Sea*, p. 23.
 156. Lundstrom, *First South Pacific Campaign*, pp. 94–95.
 157. Ibid., p. 93.
 158. Lundstrom, *Black Shoe Carrier Admiral*, p. 122.
 159. Ibid., p. 126.
 160. Lundstrom, *First South Pacific Campaign*, p. 92.
 161. *Reports of General MacArthur*, pp. 45–46.
 162. Lundstrom, *First South Pacific Campaign*, p. 100.
 163. Willmott, *Barrier and the Javelin*, p. 205.
 164. Bates et al., *Battle of the Coral Sea*, pp. 28–29.
 165. Lundstrom, *First South Pacific Campaign*, p. 100.
 166. See "Admiral C. W. Nimitz, USN Orders Forces under Vice Admiral H. F. Halsey, USN to Oppose the Advance of the Enemy in the New Guinea–Solomons Islands Area," p. 4, folder CINCPAC Operation Plan 23-42, 29 April 1942, box 20, Records Relating to Naval Activities in World War II: Plans, Orders & Related Documents, CINCPAC January 1942 to April 1942, RG 38, Records of the Office of Naval Operations, NARA.
 167. Lundstrom, *Black Shoe Carrier Admiral*, p. 137.
 168. Japanese Monograph 110, p. 10.
 169. Bates et al., *Battle of the Coral Sea*, p. 26.
 170. "The Battle of the Coral Sea, May 4–8, 1942," Action Report, Commander Task Force 17, 27 May 1942, p. 2, RG 38, Records of the Office of the Chief of Naval Operations, Records Relating to Naval Activity during World War II, WW II Action and Operational Reports, NARA.
 171. Layton Papers, p. 233.
 172. Bates et al., *Battle of the Coral Sea*, p. 15.
 173. Willmott, *Barrier and the Javelin*, p. 208.
 174. Lundstrom, *First South Pacific Campaign*, pp. 98–99.
 175. "Battle of the Coral Sea, May 4–8, 1942," p. 2.
 176. Cited in Willmott, *Barrier and the Javelin*, p. 207.
 177. Bates et al., *Battle of the Coral Sea*, pp. 12, 32.
 178. Ibid., pp. 30–31.
 179. "Battle of the Coral Sea, May 4–8, 1942," p. 3.
 180. *Reports of General MacArthur*, p. 47.
 181. Willmott, *Barrier and the Javelin*, p. 208.
 182. Morison, *Coral Sea, Midway and Submarine Actions*, p. 25.
 183. Bates et al., *Battle of the Coral Sea*, p. 39.
 184. Ibid., p. 38.
 185. Dull, *Battle History of the Imperial Japanese Navy*, p. 121.
 186. "Battle of the Coral Sea, May 4–8, 1942," p. 3.
 187. Willmott, *Barrier and the Javelin*, p. 220.
 188. Cited in Parker, *Priceless Advantage*, p. 27; "Summary of Japanese Naval Activities."
 189. Parker, *Priceless Advantage*, p. 28.
 190. Morison, *Two-Ocean War*, p. 143.
 191. Lundstrom, *First South Pacific Campaign*, p. 104.
 192. Ibid., p. 100.
 193. "Battle of the Coral Sea, May 4–8, 1942," p. 4.
 194. Ministry of Defence (Navy), *War with Japan*, p. 138.
 195. Arno Sist, *Setting Sun: A Critical Analysis of Japan's Employment of Naval Airpower in the Battle of the Coral Sea* (Maxwell Air Force Base, Ala.: Air Command and Staff College, Air Univ., April 1998), p. 11.

196. Cited in Dull, *Battle History of the Imperial Japanese Navy*, p. 122.
197. Gill, *Royal Australian Navy 1942–1945*, p. 45.
198. Morison, *Coral Sea, Midway and Submarine Actions*, pp. 31–32.
199. *Japanese Army Operations in the South Pacific Area*, p. 62.
200. Gill, *Royal Australian Navy 1942–1945*, p. 46.
201. Dull, *Battle History of the Imperial Japanese Navy*, p. 124.
202. Morison, *Coral Sea, Midway and Submarine Actions*, p. 32.
203. “Battle of the Coral Sea, May 4–8, 1942,” p. 5.
204. Ibid.
205. Morison, *Two-Ocean War*, p. 144.
206. “Battle of the Coral Sea: The Events of 7 May 1942,” *The Pacific War*, p. 4, www.pacificwar.org.au/.
207. Ibid.
208. Gill, *Royal Australian Navy 1942–1945*, p. 49.
209. Lundstrom, *Black Shoe Carrier Admiral*, p. 161.
210. Willmott, *Barrier and the Javelin*, p. 233.
211. Morison, *Coral Sea, Midway and Submarine Actions*, p. 33.
212. *Japanese Army Operations in the South Pacific Area*, p. 63.
213. Ministry of Defence (Navy), *War with Japan*, p. 141.
214. Morison, *Coral Sea, Midway and Submarine Actions*, p. 40.
215. Ibid., p. 139.
216. “Battle of the Coral Sea: The Events of 7 May 1942,” p. 2. The time of the attack is also reported as 1115.
217. Gill, *Royal Australian Navy 1942–1945*, p. 47.
218. Morison, *Two-Ocean War*, p. 144.
219. Morison, *Coral Sea, Midway and Submarine Actions*, p. 56.
220. Ibid., p. 2.
221. Juergen Rohwer and Gerhard Hummelchen, *Chronology of the War at Sea 1939–1945: The Naval History of World War II*, 2nd ed. (Annapolis, Md.: Naval Institute Press, 1992), p. 138.
222. Bates et al., *Battle of the Coral Sea*, p. 87.
223. Morison, *Two-Ocean War*, p. 145.
224. Commander in Chief, Pacific Fleet, “Action Report Battle of the Coral Sea, 4–8 May 1942, 17 June 1942,” p. 5, available as CD 01573, MilSpecManuals.com.
225. Morison, *Coral Sea, Midway and Submarine Actions*, p. 57.
226. Morison, *Two-Ocean War*, p. 145.
227. Lundstrom, *First South Pacific Campaign*, p. 112.
228. Ibid., pp. 112–13.
229. Morison, *Coral Sea, Midway and Submarine Actions*, p. 61.
230. Ibid., p. 115.
231. Cited in *ibid.*
232. JICPOA-CINCPOA Intelligence Bulletins 16 March–1 June 1942.
233. Cited in Lundstrom, *First South Pacific Campaign*, p. 115.
234. Morison, *Coral Sea, Midway and Submarine Actions*, p. 62.
235. Ibid., p. 113.
236. Ibid., p. 63.